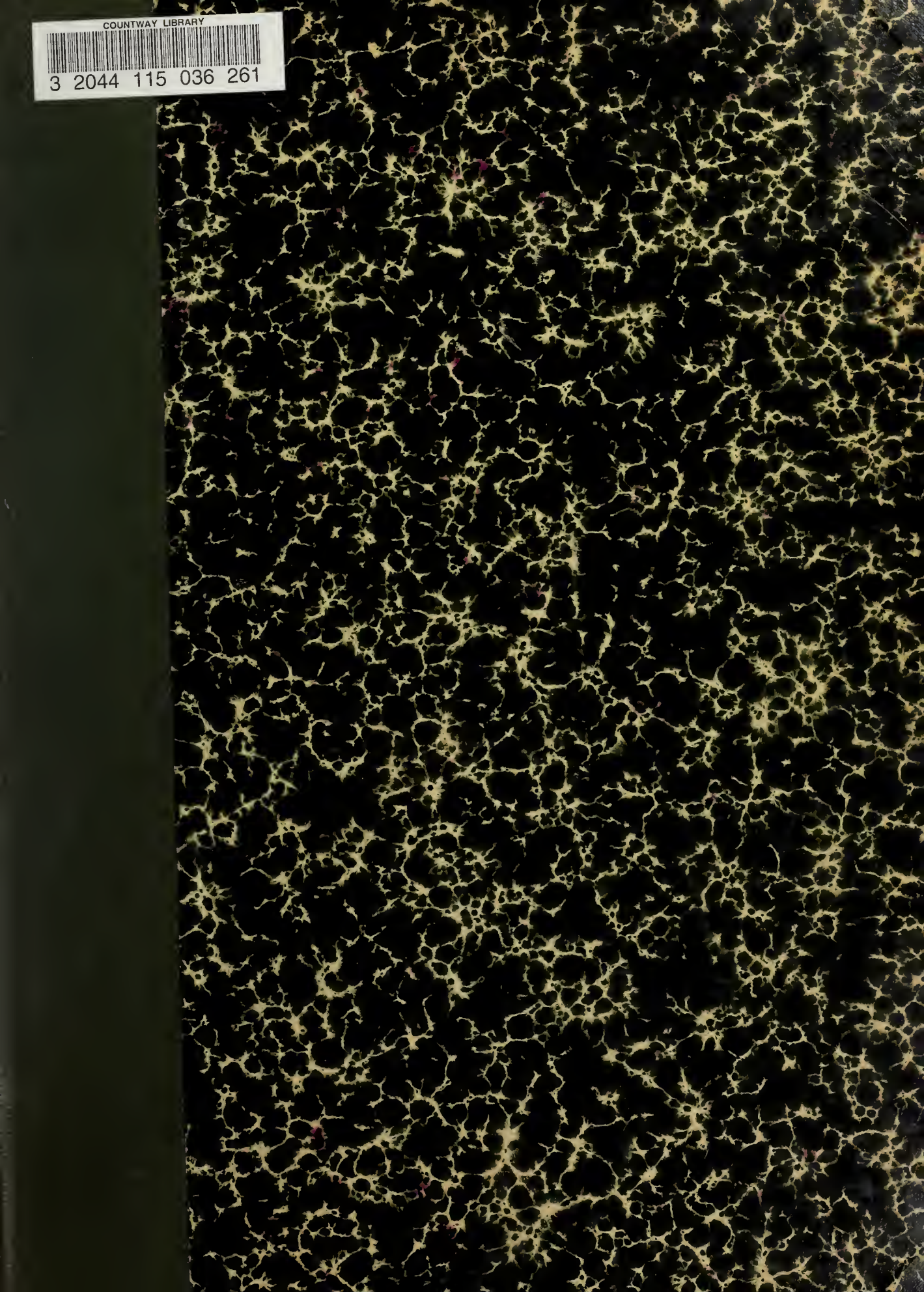
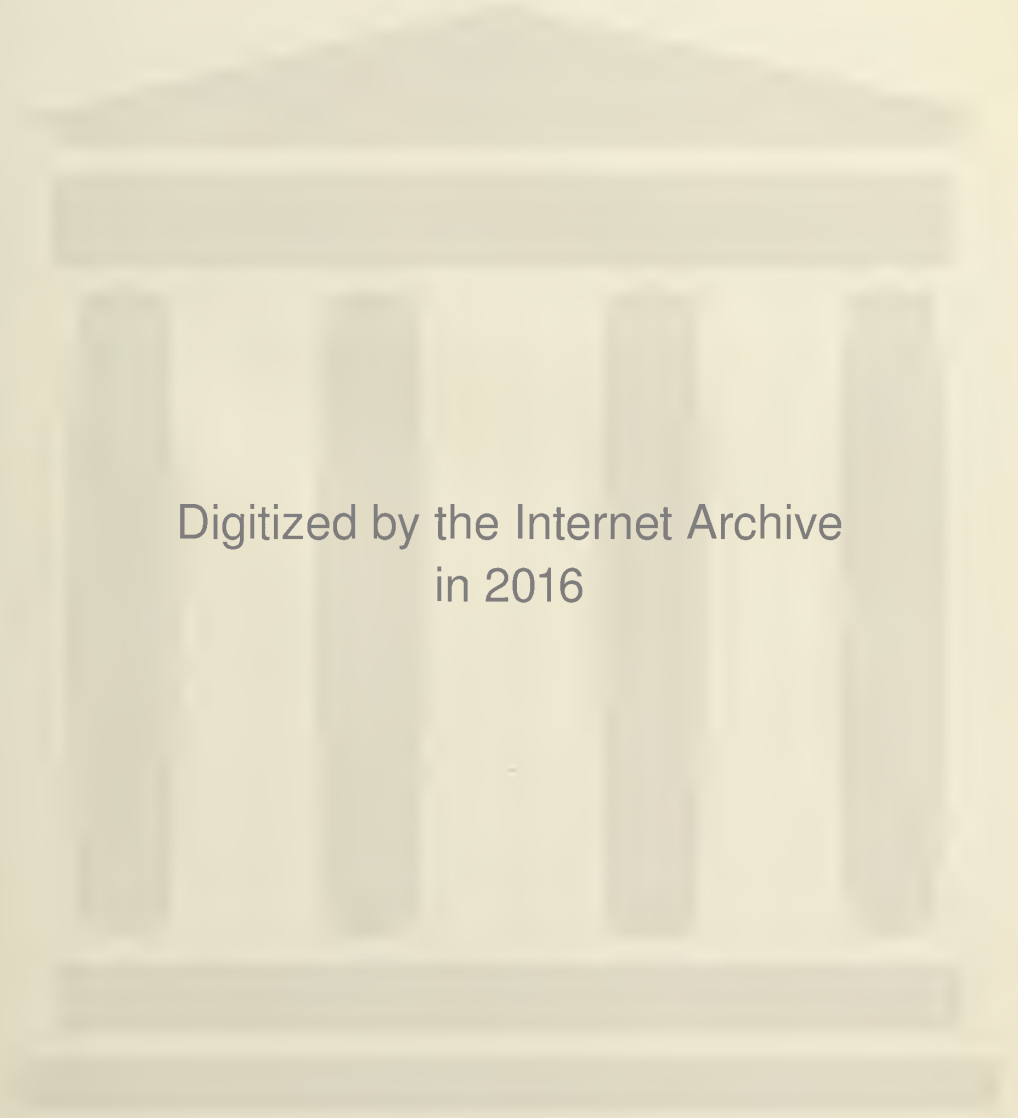
COUNTWAY LIBRARY
3 2044 115 036 261



BOSTON
MEDICAL LIBRARY
8 THE FENWAY


Digitized by the Internet Archive
in 2016

https://archive.org/details/journalofindiana2819indi

THE JOURNAL

of the

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

•

Issued Monthly
Under the Direction of the Council

•

E. M. SHANKLIN, M. D., Editor
THOMAS A. HENDRICKS, Managing Editor

EDITORIAL BOARD
F. T. ROMBERGER, M. D., Lafayette
THURMAN B. RICE, M. D., Indianapolis
PIERCE MACKENZIE, M. D., Evansville
L. P. HARSHMAN, M. D., Fort Wayne
ERNEST RUPEL, M. D., Indianapolis

•

OFFICE OF PUBLICATION
1021 Hume Mansur Building, Indianapolis, Indiana

•

INDEX TO VOLUME 28

January to December, inclusive, 1935

28862

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

OFFICE OF PUBLICATION: 1021 Hume Mansur Bldg., INDIANAPOLIS, INDIANA

VOLUME 28 JANUARY, 1935 NUMBER 1

ORIGINAL ARTICLES

MECHANICAL FACTORS IN RENAL INFECTIONS*†

DAVID W. MACKENZIE, M. D.

MONTREAL

It is not the main purpose of this paper to place anything new or original before you. Rather, it is to call your attention to some ordinary but important facts, and to emphasize these facts in the hope that an informal discussion and demonstration of them may result in suggestions of value to us all. It would seem particularly fitting at the present time that we should discuss mechanical factors in infection, for in recent years the organisms of disease have received considerable attention, to the neglect at times of the predisposing factors. Let me begin, then, with the statement of a few axioms which appear fundamental in dealing with bacterial infection.



DAVID MACKENZIE

Bacteria are the exciting cause of infections, but they are by no means the sole cause. Many bacteria, which are usually non-pathogenic, under certain conditions become pathogenic. Many bacteria which can become pathogenic are almost universally present in the throat, bowel, and skin of all individuals. This is especially true of those micro-organisms found in the kidney, where by far the most common, excluding the tubercle bacillus, are the colon bacillus and the staphylococcus. Almost universally and daily these bacteria are invading the blood stream in varying doses; they are being distributed throughout the tissues and are got rid of by the excretory channels, occasionally becoming pathogenic and setting up a local or general inflammation.

The problem is not how we can sterilize the human being of these bacteria. It is, rather, why do these bacteria become pathogenic in certain individuals and not in others?

In the causation of disease, predisposing factors of a great variety must exist to enable the exciting cause, the micro-organisms, to act. The bacteria are universally present; the predisposing causes are variable factors, and when present in certain individuals in one or more variants enable the bacteria to set up inflammation and fever, or in other words disease.

The power of the kidney to excrete micro-organisms has been a subject of scientific investigation and discussion for many years. The earlier investigators, notably Cohnheim[1], showed that insoluble particles like fat and cinnabar could pass through the healthy kidney without damaging it. Others, such as Biedl and Kraus[2], in 1896, showed that such organisms as staphylococcus aureus, colon bacillus, typhoid bacillus and other organisms passed through the healthy kidney. Rolly[3], Brown[4] and Cunningham[5] showed that tubercle bacilli appeared in the urine without evident damage to the kidney.

However, other workers of more recent date, Wyssokovitch[6] in 1886, Cocordi[7] in 1888, Sherrington[8] in 1893, Cotton[9] in 1895, and Jahn[10] in 1910, found organisms appearing in the urine with evidence of the production of kidney lesions.

Cabot and Crabtree[11] in 1916 found, in a study of sixty cases of so-called suppurative nephritis, that bacteria circulate in the blood and are excreted through the kidneys with the production of mild or severe lesions. In colon bacillus pyelonephritis they found the portion of the kidney damaged was as a rule the convoluted tubule. Microscopically these showed cloudy swelling only. The kidney damage found was of mild degree and short duration.

Medlar[12] in 1924, in producing experimental renal tuberculosis, found that in no case where tubercle

*Presented before the General Meeting of the Indiana State Medical Association, Indianapolis session, October 10, 1934.

† Department of Urology, Royal Victoria Hospital, Montreal.



Fig. 1. Pyelogram showing markedly dilated right ureter and renal pelvis due to lodgment of ureteral calculus in the intramural portion of the right ureter.

bacilli were found in the urine did the kidney escape infection. In order to prove this he had to make serial sections of the kidneys. He was thus able to prove active tubercle formation which otherwise would have been overlooked.

Helmholz[13] claims in a recent article on urinary infection of the colon type that colon bacilli are not excreted by the kidneys without the production of renal lesions. In no instance did he recover the bacteria in the urine of a rabbit earlier than five hours after intravenous injection, and only those organisms that produced renal lesions were found regularly in the urine after seven hours.

While the recent experimental research seems to prove that the kidney does not excrete bacteria without at least some damage to it, the part I wish to emphasize here is the almost unbelievable recuperative power of the kidney in the face of such damage. The ability of the kidney successfully to cope with infection depends greatly upon the recognition and removal of the predisposing factors in the causation of the infection.

The bacteria which most commonly are or may be the exciting cause of renal infection may be roughly grouped as follows: First, the coccus group, chiefly staphylococcus; second, the acid-fast bacillus, which means practically only the tubercle bacillus in man; third, the colon bacillus group in order of frequency—B. communis, B. communior, B. fecalis, B. acidi formans, etc.; and, fourth, the rare forms of bacteria of variable pathogenicity found in the urine. Of these types the colon bacillus is by far the most common infecting organism of the urinary stream; from eighty to ninety per cent of persistent urinary infections are due to this organism. Paths by which they find their way to the urinary stream have been discussed repeatedly. We believe the blood route is by far the most common, but we will not stop here to outline our reasons for this belief.

The tubercle bacillus causes lesions in all parts of the kidney. The initial lesions are the ordinary tubercle formations. The subsequent history depends on the virulence of the bacilli and on the local resistance. Multiple, small foci form, as a rule, in the cortex, and these foci spread and coalesce.

In the medulla, the pelvis usually becomes involved early and the kidney may be reinfected, giving the picture of an ascending infection. This is also the picture when the pelvis is the starting point.

Finally, all parts of the kidney, pelvis, medulla, and cortex become involved. It must be understood that a great percentage of the kidneys removed show this advanced stage, in which it is no longer possible to venture even a guess at the location of the point of entrance of the bacilli.

In 1926, one member of our staff, A. B. Hawthorne[11], working experimentally, found the commonest sites of localization of foreign bodies in the kidney to be in the terminal glomeruli just under the capsule of the kidney, and in the subendothelial layer of the renal pelvis and ureter. He injected India ink into the ear veins and renal arteries of



Fig. No. 2. Female child aged 8 years. Retrograde pyelogram showing markedly dilated lower right ureter and congenital malformation of right renal pelvis and kidney. History of frequent attacks of pain in right flank with pyuria.

rabbits. The kidney became quickly suffused with the ink; however, it rapidly rid itself of the foreign particles, leaving in most cases only punctate particles of ink just under the kidney capsule and under the mucosa of the pelvis. In those kidneys where a hydronephrosis had been previously produced by complete or partial ligation of the ureter, the kidney freed itself much less rapidly and less successfully, leaving a more marked deposition of ink particles in the sites mentioned before. This work was later corroborated by Duncan Morrison of Edinburgh, who used bacteria, also.

The coccus type of infection gives rise to glomerular and cortical lesions which, from the habit of the organism, result in suppuration and production of abscesses and extensive perirenal fat invasion with abscess formation. Cocci appear in the urine late, and rarely cause pyuria because they very seldom invade the tubules or pelvis with their lesions. However, the organism can nearly always be obtained from the culture of the urine.

The infection starts as a boil or a carbuncle in the skin, infection of the tonsils or sinuses, or of the prostate or seminal vesicles, etc. Usually a history of some such previous focus of infection is obtained.

With the colon group, the picture is entirely different. The organisms may pass through the kidney and may leave little or no trace of their course to be seen in the microscopical sections, save slight cloudy swelling of the tubules. Unlike the coccus family which settles and grows on entering the cortex, the colon group quickly reaches the urinary stream. There is promptly a marked reduction in kidney function, but if drainage is adequate this reduction is temporary and is often quickly followed by complete recovery of functional activity.



Fig. No. 3. Female child aged 1 year. Pyelogram showing stricture of upper ureter and dilatation of middle ureter. History of frequent attacks of fever with gastro-intestinal disturbance, malnutrition and pyuria.



Fig. 4. Stricture of lower right ureter with dilatation of ureter and renal pelvis following operation on pelvic organs.

At this point the mechanical factors interfering with renal drainage come on the stage, and play their part as predisposing factors by causing urinary stasis in the kidney pelvis, or ureter.

The subject of colon bacillus pyelitis has been investigated with marked thoroughness in many of its aspects, but it seems to us that clinicians might still give more thought and care to the mechanical agencies, particularly those outside the ureter, as etiological factors in these infections.

Any condition of the kidney or ureter which causes urinary stasis must be regarded as a factor in the etiology of infection of the renal pelvis.

The obstructing cause may be within the urinary tract or outside of it. The most common cause of obstruction within the urinary tract is stone. The most likely sites for lodgement of urinary calculus are at the uretero-pelvic junction, at the brim of the bony pelvis, and at the intramural portion of the ureter as it goes through the bladder wall. The obstructing cause may also depend upon abnormality of development. It has been our finding that such abnormality may take place anywhere along the urinary canal but more particularly does it occur in the upper portion where embryological defects between the pelvis and the kidneys are so often found. Growths and inflammations in the



Fig. 5. Female aged 23 years. Nephroptosis with mild phydronephrosis. This illustrates the acute angulation at the uretero-pelvic junction where the ureter was fixed by fascial bands.

neighboring organs may involve the urinary tract and thereby cause urinary stasis. Such conditions are found not infrequently in disease of the pelvic organs in women, and also following operations upon these organs. Since the extensive use of radium in the treatment of malignant disease of the uterus and other pelvic organs, urinary stasis and infection sometimes come about due to involvement of the lower ureteral segment in the ensuing cicatrization of the surrounding structures. One must not forget the urinary stasis that occurs during pregnancy. We have demonstrated in a series of normal pregnant women[15] a ureteral and renal pelvic dilatation and stasis. This is found always on the right side, and nearly always on the left as well. Such dilatation, we believe, is physiological, but nevertheless is a definite invitation to renal infection. Not infrequently it has been found that renal stasis has been caused by an involvement of the ureter anywhere along its course in dense, calcified lymph glands.

By far the most common cause of obstruction in the upper ureter and pelvis is the sagging or ptosed kidney. Birdsall[16] in a recent paper on ptosis of the kidney, concerning the fixation of the kidneys, says "the maintenance of the kidneys has been variously ascribed to the support afforded by the peritoneum, the perirenal connective tissue and fat, the blood vessels, the surrounding organs, and the intra-abdominal pressure. Gerata has pointed out in particular the great support and fixation the kidneys receive from the renal fascia which envelopes the organ in a distinct anterior and posterior layer. Bonney has also made the observation that imperfect development or acquired relaxation of this renal fascia is the factor principally concerned in the production of floating kidney." Mobile and abnormally placed kidneys are frequently to be found in the tall, long-waisted and thin female subject. The kidney is freely movable and may assume many positions, even torsions. Crabtree[17], writing on the nature and significance of renal stasis, expresses very clearly what happens in ptosis of the kidney. "It must also be remembered that the ureter is loosely adherent to the peritoneum throughout the greater portion of its course from the brim of the pelvis upward toward the kidney. About three centimeters from the pelvis the ureter leaves its close relation to the peritoneum and passes through the perinephritic fat to gain the pelvis. This is known as the mobile portion of the ureter. Not only is it the point at which foetal abnormalities are most apt to exist, but it is the point at which kinking of the ureter in movable kidneys is apt to take place. Kinking implies fixation of the ureter at the point of kinking. In still other instances, unusual thickness of the bands of fibrous tissue which normally bind the ureter



Fig. 6. Same patient as in Fig No. 7. Right pyelogram showing the kidney in position for free drainage after freeing of fibrous bands and nephropexy.

loosely to the peritoneum at this point have been found to be sufficient cause for hooking up the ureter in this movable portion of its course." When the ureter is fixed by fibrous bands, such points of fixation act as a fulcrum for the sagging kidney and may cause repeated onslaughts of retention in the renal pelvis and upper ureter. Such attacks of retention may be very mild, giving rise to only vague symptoms such as occasional backache. Now, due to the mobility of the kidney, the attacks are repeated and a vicious cycle is produced—the greater the retention becomes, the more dense the fibrous bands are made. Mild attacks of inflammation, frequently unrecognized, may come about and add to the intensification of the constricting bands. Thus the cycle continues until the obstruction becomes a very dense band and the intermittent hydronephrosis becomes a permanent one. Infection and ultimate destruction of the function of the kidney will most surely result.

Here reference may be made to the aberrant vessel as a cause of hydronephrosis. The abnormal or aberrant blood vessel to the kidney has been much exploited. Doubtless it is often a definite embryological cause of hydronephrosis, but we feel that many of such vessels are displaced by the hydronephrosis and are therefore a result rather than a cause. It is easy here to confuse cause and effect. In many of these cases the vessels are drawn out of place and seem to obstruct the ureter, when in reality they are forced into their abnormal position by the distending pelvis. Certainly in many cases it was not the supernumerary vessels but the mobility of the kidney which determined the development of the distention.



Fig. 8. Hydronephrosis right in female aged 23 years. This illustrates the aberrant vessel to the kidney and also shows a normal renal vessel being pushed out by the distending renal pelvis.

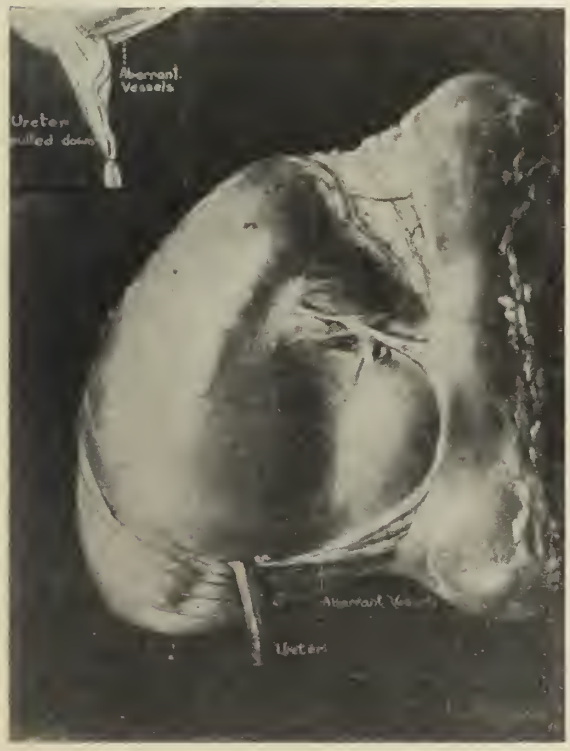


Fig. 7. Female aged 24 years. Hydronephrosis. This drawing shows the dense fibrous bands at the uretero-pelvic junction causing acute kinking of the ureter. This type of obstructive kidney lesion is today being repaired and saved by plastic renal surgery.

The importance of the rôle of mechanical agencies in the etiology of renal infections may be realized when we consider that in our large urological service in nearly 13,000 admissions, 36 per cent, or 4,688 cases, were diagnosed as definite renal conditions. More important still is the fact that of all these kidney conditions 63 per cent were of the obstructive type—pyelitis, hydronephrosis, pyonephrosis, nephroptosis, and nephroptosis with hydronephrosis—conditions the etiology of which lies in the mechanical obstructions or defects described above.

A careful analysis of our series of obstructive renal conditions confirms our early impression that the etiological factors concerned in the production of such conditions have their incipiency in early life. One-twelfth of all our admissions were infants, children, and adolescents up to twenty years of age. It appears significant that in this series of young people the renal conditions parallel those of our entire series, and, furthermore, that the same obstructive type of kidney lesion should be found in them in almost the same percentage of cases as in adults, 59.1 per cent.

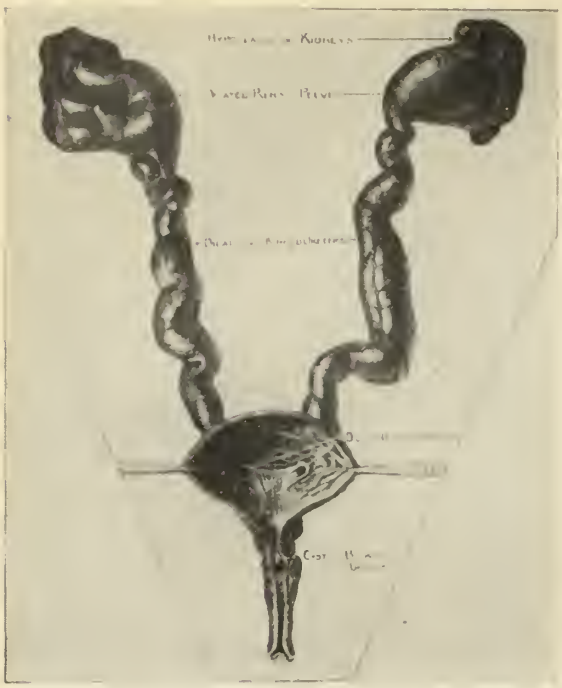


Fig. 9. Bilateral hydronephrosis and hydroureter in child from congenital urethral obstruction.

Moreover, our study reveals that infants and children are frequently subject to pyelitis. Meredith Campbell[18], in a careful analysis of 402 cases of chronic pyuria in juveniles, says, "The etiologic relationship of chronic urinary infection to disturbances of the body as a whole is too commonly overlooked. For example, gastrointestinal upsets are among the outstanding symptoms in approximately one-half of all cases of persistent urinary infection in juveniles. These manifestations include anorexia, nausea, vomiting, constipation, diarrhea, gastritis, anemia, failing strength, loss of weight, or failure to gain."

Some years ago, in consultation with a pediatrician, we saw seven cases of pyelitis, within five days after a remark had been made to the pediatrician that these cases of fever with gastro-intestinal upsets in children might very likely be pyelitis. Every child having more or less repeated attacks of fever with so-called gastro-intestinal upsets should have careful, perhaps repeated urinalysis, and if there is any pyuria, the child should be subjected to a thorough urological examination. Today such examination can be made very conveniently by intravenous pyelography. The chief advantage of this method of study is in infants and children.

These renal infections may quite early in life go on to complete destruction of the organ. We have had recently nine cases of pyonephrosis in patients under the age of twenty years, four of which have been less than four years of age. Obstructive kidney conditions such as hydronephrosis and nephroptosis are very apt to be found in the rapidly growing adolescent girl of the tall, long-waisted and thin type. The right kidney is the organ most often affected, due to the now well recognized fact of the lack of kidney bed in this type of individual. The girl of this make-up is very likely to become a subject of pyelitis during pregnancy, especially if marriage and pregnancy take place in early adult life.

MANAGEMENT OF THE OBSTRUCTIVE RENAL CONDITION

The most important thing to do is to prevent the development of the obstructive lesions which are the underlying factor in the production of the conditions described. The organism which is the



Fig. 10. Male child aged 5 years. Aplasia of left kidney with marked hydroureter and stricture of ureter.

exciting factor in these conditions will not take lodgement if the drainage is adequate. It is extremely important that every infant and child exhibiting more or less repeated attacks of fever with so-called gastro-enteritis should be carefully examined, particularly by repeated urinalysis. A careful and complete urological study including cystoscopy must be done if pus, blood or other pathological elements are present in the urine.

It is exceedingly important that the adolescent girl or young adult of the type described above, who complains of vague abdominal pains or more particularly of "back-ache," should have a thorough urological examination, whether or not the urine shows pathological elements. In the case of a child, an adolescent, or a young adult, there may be found lesions which, if corrected at this age, may prevent the further development of an obstructive and ultimately destructive lesion of the kidney.

In children, rest in bed, forcing of fluids, urinary antiseptics, notably urotropin in conjunction with ammonium chloride, may be used. Latterly a ketogenic diet has been used with variable success. These measures should be used before a resort to surgery. It is obvious, however, that these measures are of only temporary avail in the presence of a definite obstructive lesion.

In older persons with mobile kidney conditions the same measures may be used with, in addition, rest at the crucial period of the day; that is, the patient should be instructed to lie flat in the dorsal decubitus in the early afternoon or middle of the afternoon, for a period of from one to two hours. Such posture will allow a mobile kidney to assume its normal position and drain properly. Along with this it is advisable that the patient be put upon a weight increasing diet with a view to producing a pad of fat about the kidney so that it may be placed in good draining position. Abdominal supports in the form of pads underneath corsets or belts to hold the kidney in its rightful position may be prescribed. It is advisable to try these palliative measures over a prolonged period, and with prolonged rest, to insure success. However, if it is evident from the outset that such measures will be of little or no avail, one should then resort to surgery. When the kidney is anchored in a position of poor drainage by fibrous bands, or as the result of inflammatory reactions, it is much better to free those bands surgically and to place the kidney in a position for good drainage.



Fig. No. 11. Male child aged 13 years. Pyelogram on left showing marked hydronephrosis with clubbing of the calyces. History of frequent attacks of pain in left upper abdominal quadrant and loin. Occasional attacks of fever.

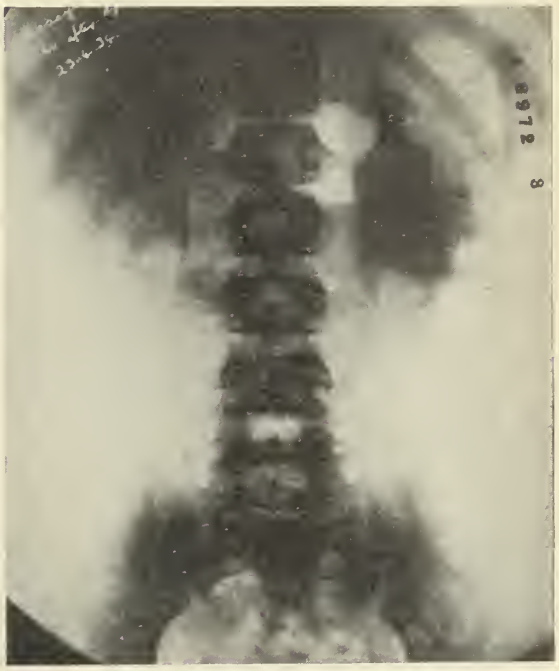


Fig. 12. Same child as figure 11. Intravenous pyelograms taken 3 weeks after excision of redundancy of the renal pelvis and fascial bands at uretero-pelvic junction. Pain in loin and upper abdomen entirely absent since plastic operation.

CONSERVATIVE PLASTIC SURGERY OF THE KIDNEY AND URETER

Urologic surgery has made, in the past few years, enormous strides towards conservatism. This is particularly evident in surgery of the kidney. Today urologists are attempting, and in the main successfully, to conserve kidneys which in the past they would have sacrificed. This is especially evident in hydronephrosis from whatever cause. If the predisposing cause is a constricting band at the uretero-pelvic junction or lower in the



Fig. No 13. Male aged 26 years. Pyelogram right renal pelvis showing enormous hydronephrosis with acute angulation at uretero-pelvic junction. In this case there was also a well marked hydronephrosis on the left.

ureter, such bands are today freed and the redundancy of the renal pelvis is excised and the pelvis repaired. Methods of plastic repair of the renal pelvis and ureter can best be described by diagrammatical drawings.

DISCUSSION

There are some thoughts and ideas concerning the conditions mentioned which are important and which should be emphasized, and emphasized with all the power of which we are capable. These obstructive kidney conditions are far more prevalent than is commonly supposed. We are finding, undoubtedly because we are looking for them, an increasing number of such kidney conditions in individuals in the first three decades of life. The etiological conditions responsible for the obstructive kidney lesions unquestionably have their beginning in early life. A certain percentage of these are frankly congenital and are already advanced lesions at the time of birth or shortly thereafter. However, the great majority are not advanced but are only incipient, and if recognized and corrected at this age their progress can be halted.

The responsibility for the early detection of these kidney infections lies with the family physician. Any infant, child or adolescent exhibiting fever with pus in the urine, must be thoroughly examined. The very fact that the patient is a victim of pyelitis or other obstructive kidney condition, means that there is a mechanical etiological factor present, and that factor must be found so that it may be corrected at the earliest possible moment. It is only through early, careful and thorough examination that we will be able to save a kidney from progressive destructive pathology. In the great majority of cases the palliative or prophylactic treatment outlined earlier in the paper will be effective, but in other cases the ureter will have to be freed of its fibrous constricting bands and the kidney placed in a position of free drainage by nephropexy, by the most adequate method. Where, in addition, the renal pelvis is redundant, the redundancy should be excised and the opening repaired, so that drainage is free and sufficient. In those cases where obstruction has gone so far as to destroy the function of the kidney beyond all repair, nephrectomy only is left.



Fig. 14. Same patient as Fig. No. 13. Intravenous pyelogram showing a smaller, funnel-shaped renal pelvis with good definition of the calyces three weeks after plastic operation on right renal pelvis and ureter.

BIBLIOGRAPHY

[1] Cohnheim, J. F.: Vorlesunger uber allgemeine pathologie Berlin, A. Hirschwald. 1882. Vol. 1 and Vol. 2.

[2] Beidl, A. and Kraus, B.: *Arch. f. expe. Path. u. Pharmakol.*, 37:1-25, Dec. 30, 1896.

[3] Rolly, F.: *Munchen Med. Wchnschr.*, 2, 1873-1875. Sept., 1909.

[4] Brown, L.: *J. A. M. A.*, 1915. LXIV, 886.

[5] Cunningham, J.: *Ann. Surg.*, Phila. 1912. LVI. 818.

[6] Wyssokovitch, W.: *Zeitschcr f. Hyg.*, 1886. 113.

[7 8 9] Cocordi, Sherrington, Cotton: See Biedl and Kraus. *Arch. f. exp. Path. u. Pharmakol.*, 1896. XXXVII. 1.

[10] Jahn.: *Centralblatt f. Bakteriol.*, 1910. LV. 276.

[11] Cabot, H. and Crabtree, E. G.: *S. G. & O.*, 1916. XXIII, 495-537.

[12] Medlar, E. M.: *Amer. Rev. Tuber.*, Balt., 1924-25. X, 370-391.

[13] Helmholz, H. F.: *J. Urol.*, Feb., 1934. XXXI, No. 2, pp. 173-192.

[14] Hawthorne, A. B. *Trans. Amer. Genito Ur. Surgeons.*

[15] Seng, M. I.: *J. Urolog.*, XXI, No. 4, April, 1929, p. 475.

[16] Birdsall, J. C.: *Penna. Med. J.*, Dec., 1933.

[17] Crabtree, E. G.: *S. G. & O.* 1922. XXXV, 733-742.

[18] Campbell, M. F.: *J. Urolog.*, Feb., 1934. XXXI, No. 2, pp. 205-217.

SILICOSIS*†

F. G. BANTING, M. D.
TORONTO

Inhalation of dust over a period of years produces pathological changes in the lung. Many dusts are relatively inert. Dangerous dusts have one factor in common, namely, they all contain silica. Pneumonoconiosis is the term applied to diseases caused by dust inhalation; silicosis is applied to a specific disease due to the inhalation of silica-containing dust.



FREDERICK BANTING

Silicosis is an industrial disease which occurs among hard-rock miners, sand-blasters, stone-cutters, lens-grinders and among those whose occupations expose them to silica-containing dust. It presents a tremendous economic problem and in many countries has become a compensable disease. In South Africa, during the years 1911-1929, over 53 million dollars were paid in compensation to workers in the Rand mines who were suffering from silicosis. The indemnities, the loss of life and disability threatened the gold mining industry, but research work and the introduction of methods of controlling dust have done much to lessen the occurrence of this disease. The clinical and pathological reports of the South African group of workers have become of inestimable value, and we are indebted to them for their splendid contribution to our knowledge of silicosis.

Silicosis is an insidious disease which may require from 3 to 25 years to produce symptoms and disability. The disabling factor is the fibrosis and nodular formation which takes place in the lung tissue and gives rise to interference with the respiratory function. From both clinical and experimental observations it would appear that the fibrosis is not produced until large amounts of silica dust have been inhaled over long periods of time. Physical signs are lacking in the early stages of the disease. Limitation of movement of the chest, dullness on percussion, changes in breath sounds, pain and shortness of breath are late manifestations of the disease. Until these signs and symptoms appear the clinician must depend for his diagnosis mainly upon the history of exposure to silica-containing dust and x-ray plates of the lungs. In uncomplicated cases of long standing, shortness of breath becomes a prominent feature and the right heart may hypertrophy as a result of its increased work.

Lung infections generally accompany silicosis and very often appear to play a more important role in the disability than the silicosis itself. Infections in themselves sometimes produce focal fibrosis, but when they are accompanied with the inhalation of silica-containing dust the occurrence of fibrosis is widespread throughout the lung. The presence of infection possibly explains why of two miners working side by side one develops silicosis in 3 or 4 years while the other shows no signs of the disease after 20 years. The outstanding infection which occurs with silicosis is tuberculosis. Pathologists rarely, if ever, find an advanced silicotic lung that is free from tuberculosis. Certain workers believe that if the tuberculous infection could be eliminated silicosis would cease to be a problem.

Characteristic fibrosis is produced by dusts which contain free silica, i.e., silica dioxide. In general silicates are less dangerous than free silica, but certain silicates, particularly asbestos, kaolin and possibly sericite, appear to be potentially dangerous. It is not clear as yet whether the silicates produce their toxic action as silicates or whether they disintegrate in the body cells and liberate silica which is known to be toxic. The fibrosis is only produced by particles less than 10 microns in diameter. Larger particles rarely reach the alveoli. It is only particles which are small enough to be ingested by the phagocytes and which are carried into the lung tissue which produce the fibrosis.

The production of silicosis in animals has been attempted by a large number of workers. Gardner has closely reduplicated industrial dust hazards by building small compartments in which his rabbits and guinea pigs are housed. The atmosphere of this small room is polluted for 8 hours each day with the dust under investigation. However, such an investigation can only be carried out in a specially constructed laboratory. Gardner has found by his procedure that it requires from 2 to 3 years of exposure to silica dust to produce silicotic nodules in the lungs of animals.

To obviate the difficulty of space and expense, Kettle and Hilton endeavored to produce fibrosis by injecting quartz dust suspended in water through the trachea into the lungs of guinea pigs. By this technique they were able to produce extensive fibrosis. Recently Kettle reported that fibrosis had not developed in guinea pigs in 500 days following injections of kaolin or dead tubercle bacilli, but when a mixture of the two was given fibrosis occurred within 112 days. This illustrates how a potentially dangerous dust becomes a real hazard when combined with infection.

Miller and Sayers injected a number of dusts intraperitoneally. They found that the dust accumulated in the most dependent part of the peritoneal cavity and that dust containing free silica differed from all others in that it produced nodules of fibrotic tissue.

Jones found large numbers of sericite fibres in the lungs of patients dying of silicosis. Following this observation he investigated the rocks of various mines where a high incidence of the disease was reported. On correlating the incidence of

* Presented before the General Meeting of the Indiana State Medical Association, Indianapolis, October 11, 1934.

† From the University of Toronto.

silicosis with the amount of sericite found in the rock, he came to the conclusion that sericite was a more important factor in the production of lung fibrosis than was silica. He cited the example of the Kolar mines in India, where there is no silicosis, and yet the ore veins contain over 90 per cent free silica and no sericite. In contradistinction to this finding he found that there was a high incidence of silicosis in the Rand mines where the rocks contain much less free silica but a large amount of sericite. He also examined the country rock of the coal mines in Wales and found considerable sericite in those coal mines where cases of silicosis occurred, whereas there was no silicosis among the Scottish miners where sericite did not occur. Jones' theory has stimulated a great deal of interest in the problem, but few workers are prepared to accept it.

Gye and Purdy studied the toxicity of hydrated silica by administering it intraperitoneally to mice, guinea-pigs and rabbits, and intravenously to guinea-pigs and rabbits. Daily doses of 5 mgms. produced fibrosis in the liver, enlargement in the spleen and changes in the kidney which resembled interstitial nephritis within 16 days. The toxic effects of silica sol were traced to the capillary endothelium of liver and spleen.

By means of animal experimentation it is possible to trace the course of inhaled silica particles. All investigators agree that when fine particles enter the terminal air spaces of the lungs they are first taken up by the monocytes and later pass into the lymph vessels and lymph glands. There is a difference of opinion, however, as to how silica gives rise to the production of fibrous tissue. Mavrogordato has suggested that the dust laden monocyte is preserved against destruction by the silica which it contains. He believes that this cell loses its amoeboid movements, becoming a fixed connective tissue cell with fibrous processes. Gardner believes that the dust laden monocytes move into the connective tissue where they accumulate, die, and disintegrate; that the cell products and the silica thus liberated stimulate the fibrous tissue elements to proliferate, giving rise to the fibrosis.

During the past seven years we have performed many experiments in our laboratories in the endeavor to throw light on the formation of silicotic fibrosis. The work has been done by a group of workers but I shall report it as a departmental problem as the individuals have reported their results under their own names.

We planned first to study the behavior in the body of various forms of silica. The results of our earliest experiments were indecisive because we had no reliable method for estimating small amounts of silica in small amounts of tissue. It was not until 1932 that the biochemical division of the department provided us with a colorimetric method. This method does not differentiate between silicon, silica and silicates, but by it we are able to estimate the total silicon content of normal tissues, blood and urine.

All normal tissues were found to contain small but appreciable amounts of silicon; even foetal lung tissue had as much as 4.4 mgms. of silicon per 100 gms. of dry tissue. The silicon content of adult tissues varied, but, of those examined, it was found to be highest in the lung. The average silicon content of the blood of normal individuals was found to be 0.9 mgm. per 100 c.c. of blood. On an ordinary diet an adult excreted from 15 to 20 mgms. of silicon per day.

By animal experimentation it was found that the amount of silicon excreted in the urine could be increased as much as five times by feeding rabbits on oats and wheat straw. In general it may be said that the excretion of silicon in urine was found to be greater in herbivorous than in carnivorous animals. Thus it was thought that most of the silicon excreted in the urine was derived from the food. The urine of underground mine workers was examined and was found to vary from the normal of 15 mgms. to 50 mgms. per day. Since the diet of the men was not known it was impossible to conclude that the increased urinary output was due to the inhalation of dust.

Soluble silica in the form of neutralized sodium silicate was given to animals by stomach tube, and it was found that the amount of silicon in the urine was increased as much as 50 times. Small doses of silicic acid given intravenously caused the death of rabbits and dogs. This was in accordance with the findings reported by Gye and Purdy. When, however, the silicic acid was diluted and injected very slowly, a dog survived a dose of 198 mgms., over one-half of which was recovered in the urine. These experiments show that when silica is in the soluble form it is readily transported in the blood stream and, since it is rapidly excreted by the kidneys, it does not produce fibrosis.

Rabbits were exposed to silica dust by placing them in large boxes into which finely ground quartz was blown. One group was exposed for 2 hours daily for 4 months. Some of the rabbits died of pulmonary infection during the dusting period, and the remainder were killed at intervals during two years. Lungs of rabbits which were killed at the end of the four month dusting period showed a great increase in the amount of silicon, one showing 100 times the normal amount. The amount of silicon tended to decrease in the lungs of the animals which were killed during the two year period, indicating that the silica was being slowly dissolved in the body fluids. None of the lungs showed any signs of silicotic fibrosis; however, Gardner's work has shown that our dusting period was much too short.

In October, 1932, Dr. Robson, Medical Officer of a large Ontario gold mine, observed that the vast majority of cases of silicosis occurred among the underground workers, and that very few cases occurred among men in the surface crusher house, although the amount of dust to which the latter were exposed was much greater than the former. This observation suggested to him that the powder

smoke from the explosives might irritate the lung, facilitating the entry of the silica particles. Dr. Robson did not find it possible to carry out experimental work on this hypothesis at the mine; consequently, it was undertaken in our laboratory.

In planning experiments to test the effect of gas as a factor in the production of silicosis, it was decided to give one group of rabbits gas and fine silica particles, and another group gas alone. Control experiments with silica alone had already been done in connection with other work. The gases used were nitric oxide, 1 part in 10,000, mixed with sulphur dioxide, 1 part in 20,000. The rabbits were exposed 2 hours daily. The intention was to kill rabbits of each group at regular intervals, but owing to the irritation produced by the gas, most of the animals died of an acute pneumonitis after periods varying from 2 days to 40 weeks. Fortunately, the deaths occurred at about the same rate in the 2 groups and at about the desired intervals.

The interpretation of the pathological findings was complicated by the pneumonic process which occurred in patchy areas scattered throughout the lungs. The microscopic observations were made on the portions of lung not involved by pneumonitis.

The animals exposed to gas alone for periods of more than 2 weeks showed widespread changes of the bronchial epithelium characterized by degeneration, desquamation and absence of cilia. The alveoli in some areas appeared normal, but in other areas large numbers of monocytes were present in the alveolar spaces.

In the group of rabbits exposed to gas and silica dust the siliceous material was distributed diffusely throughout the lung. The monocytes of the alveoli were well filled with silica particles. The amount of silica found in the lung was in direct proportion to the length of exposure to the dust. No fibrosis was found in animals exposed for less than 10 weeks, but in some sections some alveoli were seen to be completely filled with masses of monocytes. In the centre of the mass the monocytes were rounded, but toward the periphery some of them were indistinguishable from fibroblasts. This proves that the monocyte can alter its form because there is no possibility of fibroblasts being present in the alveoli. Between the 10th and 13th week of exposure fibrosis occurred in the alveoli and gradually extended to the lymphatic aggregations. It is my opinion that this fibrosis is the result of the change in the monocyte from an amoeboid cell to a fixed connective tissue cell. All animals but one, examined after 13 weeks showed fibrotic nodules, not only in the acini and lymphatic aggregations but also in the lymphatic glands. This sequence is in contrast to the accepted theory of human silicosis where the first involvement occurs in the tracheobronchial lymphatic glands. When a section of an area of fibrosis was examined under the crossed Nicol prisms some silica was found. However, on microincineration, large amounts of silica could be demonstrated. This occult silica must therefore have been present in the hydrated state.

The interpretation of the pathological picture of the lungs of these rabbits was facilitated by the study of microincinerated sections. Unstained sections of 5 microns in thickness were mounted on a hard glass slide and placed in a specially constructed oven. The sections were heated slowly to 550-600° C. and maintained at that temperature for one hour. The ash was treated with concentrated hydrochloric acid for one-half hour and then thoroughly washed. The acid treatment removed soluble inorganic substances, leaving the silica and silicates, which are insoluble in acid. The removal of calcium by the acid treatment was of particular value in the differential diagnosis between silicotic and tuberculous nodules.

In order to facilitate the interpretation of the findings of microincineration, serial sections were made and three consecutive sections were treated as follows: the first was incinerated; the second was stained with haematoxylin and eosin, and the third was incinerated and extracted with acid. By these means it was possible to correlate the deposition of silica with fibrosis. It was found that under certain conditions lung fibrosis occurred without silica; that silica may be present without fibrosis; that innocuous silicates cannot be distinguished from harmful silica particles; and that hydrated silica, not being doubly refractive, cannot be demonstrated by crossed Nicol prisms.

There is no doubt that particulate silica leads to the production of fibrous tissue. Ten mgms. of powdered quartz suspended in saline and injected into a rabbit's ear produced a nodule 0.5 cm. in diameter in three months. It was decided to investigate the effect of dissolved silica in the form of silicic acid. Consequently, an 0.5 per cent. solution of neutralized sodium silicate was injected in the same area of rabbits' ears every other day for a year. No fibrosis occurred, although a total of over 250 mgms. of silica in this form were injected.

A second method of testing the effect of dissolved silica was by introducing cellophane sacs containing fine quartz dust into the peritoneal cavity. The cellophane was first tested by suspending a sac containing silica in a beaker of water. It was found that the silica dissolved and passed out through the wall of the sac. It was thought that by leaving the sacs in the peritoneal cavity for some months the surrounding tissue would receive a constant supply of dissolved silica. After four months in the peritoneal cavity the sacs were encapsulated in a thin semi-transparent layer of fibrous tissue, but no fibrotic nodules were found. Silica dust was placed free in the peritoneal cavity and in 4 months a mass of fibrous nodules had formed on the most dependent part of the peritoneal cavity where the silica accumulated. It would therefore appear that fibrous nodules form as a result of particulate silica and not of dissolved silica.

A saline suspension of particulate silica injected under the skin of a rabbit's ear produced firm, hard nodules the size of which varied in proportion to

the amount of silica. These nodules differed from the lung fibrosis in that they were local and resembled the reaction to a foreign body. When repeated injections of this suspension were made subcutaneously in the hind leg of guinea-pigs there was a marked local reaction which subsided in a fortnight, leaving a small fibrous nodule. In from 2 to 3 months the inguinal lymph glands became enlarged and microscopic section showed them to contain monocytes filled with silica. This indicated that when the monocytes had taken up their load of silica they migrated to the nearest lymph gland, as is thought to occur when dust is inhaled into the lung.

The means by which monocytes take up silica has been studied in tissue culture. Slides were dusted with fine silica particles and a tissue culture preparation was added. It could be seen that the only cells which engulfed the silica particles were the monocytes and they only ingested particles smaller than 6 microns. In older preparations some monocytes containing silica could not be distinguished from fibroblasts. This supports the view that the fibrosis is the result of the change in the monocyte from an amoeboid cell to a fixed connective tissue cell.

From the experimental work in our own and other laboratories the development of silicotic lesions can be pictured as follows: When fine silica particles are inhaled from a dusty atmosphere many of them pass into the terminal air spaces of the lung, where they are phagocyted by the dust cells which lie on the walls of the alveoli. Phagocytes only ingest particles whose diameter is under six microns; hence all larger dust particles are harmless. When the monocytes have taken up their load of dust particles, by means of their amoeboid movement they pass through the alveolar wall into the lungs. From here they pass into the lymph vessels, which are of two types—superficial and deep. The superficial lymph vessels drain lymph from the surface layer of the lung tissue. The deep lmphatic vessels accompany the branching bronchioles, bronchi and blood vessels and thus drain more directly into the tracheobronchial lymph glands. Lymphatic tissue occurs at the branching of the bronchioles first as aggregations, then as nodes and finally as glands as the hilus is approached. The entire lymph drainage of the lung finally passes into the tracheobronchial lymph glands.

Thus as long as an individual is exposed to dust there is a continuous stream of dust laden monocytes passing toward the tracheobronchial lymph glands. Large numbers of them accumulate in the glands and fibrosis ensues. This is the earliest occurrence of the silicotic fibrosis. If the disease could be diagnosed at this stage and the individual removed from his dusty occupation, little harm would be done, but clinical manifestations are not apparent at this stage and the worker usually carries on until the disease has progressed to a more serious degree.

Fibrosis of the tracheobronchial lymph gland interferes with the lymphatic drainage and the dust laden monocytes cannot carry off their load of silica. As a result they become imprisoned in the lymph nodes and lymph aggregations along the course of the lymph vessels. When these nodules become swollen and fibrosed the x-ray reveals a widening of the hilus shadow. At this stage there is no impairment of the respiratory function of the lung, because so far it is only the lymph system which has been affected.

The next stage in the development of silicosis consists of the formation of the true silicotic fibrous nodule in the lung tissue. A comprehensive description of this process is difficult as it is rarely seen in experimental animals and since in the human it is usually associated with lung infection. But it is reasonable to conclude that when the lymphatics become completely blocked the monocytes cannot escape with their load of silica; hence they accumulate in groups throughout the lung tissue, lose their amoeboid movements, put out processes, and become the fixed connective tissue cells which form the fibrotic nodules, which are the characteristic lesions of silicosis.

Experimental work points to particulate silica as the cause of silicosis and gives us an understanding of many of the processes involved in the formation of fibrosis. It does not, however, offer any encouragement to the patient whose lungs contain silica, since nothing can be done once the fibrosis has formed. The solution of the silicosis problem is, therefore, one of prevention and must be directed toward controlling the dust and avoiding exposure to tuberculosis.

MODERN VIEWS ABOUT NASAL INFECTION*†

RALPH A. FENTON, M. D.
PORTLAND, OREGON

Since the childhood of our race, people have worried about the nose as a portal for infection; and we have used various aromatic spices and herbs — incense, sandalwood, tobacco—for toughening the resistance of our respiratory mucosa. During the plague in Florence doctors wore an impervious coverall, with a helmet resembling a bird's head, the beak of which was filled with spices. Lepers are made to veil their noses and mouths in certain Mohammedan countries.



RALPH A. FENTON

Ancient notions of disease as a miasma arising from foul night air, or as an interference with the ascent of "vital humors"

* Presented before the General Meeting of the Indiana State Medical Association, Indianapolis, October 11, 1934.

† From the Department of Otolaryngology, University of Oregon Medical School, Portland, Ore.

from the nose into the cavities of the brain, gave rise to similarly weird ideas of the pathology of nasal irritation and discharge, which came to be grouped, even in our own days, into the general name of catarrh—a "down-flowing," thickening and corruption, of normally "light and stimulating humors."

We now know that nasal disease is very ancient, since its traces are evident in the skulls of prehistoric man. Development of the frontal lobes of the brain, above, and crowding the eyes together to secure binocular single vision, have caused anthropoid apes, monkeys and ourselves to lose the roomy nasal cavity and extensive olfactory organ of lower species; the sinuses have become more and more crowded, and with our assumption of an erect posture their primitive drainage openings have become twisted and narrowed, or covered over.

Like other structures whose function has been impeded or lost, the nasal sinuses of civilized man have become extremely vulnerable. Even savages with broad, open nostrils, and the apes and monkeys, succumb to nasal disease unknown in their natural habitat when they are exposed to the crowded living conditions of our civilization, to which we have by exposure acquired relative immunity.

A generation or two ago doctors knew little about nasal physiology and less about the sinuses. Treatment was for years directed to the accessible and more or less readily visible mucous membranes of the turbinates, septum and pharynx. Tonsils were sliced off level with the pillars; adenoids were ignored or partially twisted out with forceps; turbinates were clipped out with scissors, or later, burned to the bone by the electric cautery; the nasal septum was sawed, punched, fractured and reset with perforated tubes to hold it in place. Nobody paid any attention to the mucous membrane, which often became dry and crusted after these procedures. Only a few bold pioneers dared to enter the antrum, usually by pulling a tooth, after which a permanent fistula into the mouth often remained; the other sinuses, especially the sphenoid, resembled old maps of central Africa or the "great American desert"—they were unknown territory. Local treatment, by forcible douches and sprays, often led to middle ear and mastoid disease.

Lacking roentgen ray diagnosis, but emboldened by careful dissection, surgical pioneers of the nineties found that the accessory sinuses could easily be reached by radical operative procedures; with improvements in technique these procedures were widely adopted, but owing to sacrifice of the turbinates much damage, scarring, crusting and ultimate discomfort ensued. Reaction from these procedures, with the popularization of vaccine therapy, led to indiscriminate use of such agents, locally and subcutaneously; but in the presence of unbridled propaganda by pharmaceutical houses and without scientific information as to dosage, vaccine therapy and the use of local antiseptics fell into deserved disrepute. Let us see why these things failed to work as the curealls which they were stated to be.

We now know that the nose and its sinuses are lined by ciliated epithelium, moistened by a film of thin, tenacious mucus secreted by goblet cells and serous glands and moving smoothly, rapidly and continuously along the walls of every sinus, backward along the turbinates and downward in the pharynx until it reaches smooth epithelium and is carried into the œsophagus.

This mucous film contains antibodies which are elaborated in the epithelial cells, and is thus highly resistant to bacteria. Under normal circumstances the sinus cavities are practically sterile. This mucin film constitutes our first line of defense against dust and germs, changing as it does every fifteen or twenty minutes, day and night. The second line of defense is the ciliated epithelium, normally beating like wheat blown by the wind and provided with numerous glands. The third defense line is contained in the submucosal stroma, which is highly vascular over the turbinates and thus can be reinforced by a rapid influx of blood when cold, dust or chemical irritants interfere with ciliary action. Within the sinuses, however, this submucosal stroma is extremely thin and lacking in blood supply; hence the resistance of the sinus membranes is relatively low. Contained in the submucosal stroma are numerous fixed connective tissue cells, histiocytes, which are endowed with phagocytic powers and are mobilized to take care of irritative substances, germs and toxins which have passed the mucin film and the ciliated epithelium. These tissue phagocytes, after they are called into action, either migrate through the epithelium with their load of phagocytized material or are carried away by the lymphatic vessels. Some, remaining in the tissue, become fibroblasts and start the work of fibrous repair.

Nasal lymphatics are numerous in the turbinates and septum and comparatively few in the sinuses. With severe infection they tend to become choked with phagocytic and other broken down cells, which are carried to the deep cervical and pharyngeal glands along the spine and under the sterno-cleido-mastoid muscle, giving rise to stiff neck and localized tenderness in these regions, occasionally to deep cervical suppuration. Choking of the lymphatics of the sinuses, passing out of their ostia, leads to edema, thus impeding proper drainage from these cavities.

The blood supply of the nose is controlled by the sympathetic nervous system, and is thus intimately related to the sphenopalatine ganglion and to the great sympathetic plexuses of the abdomen and pelvis. Inhibition of proper vasomotor control in the nose may thus arise from troubles in the digestive or genito-urinary tract.

It will be seen from this brief outline of our nasal defensive mechanism that its proper functioning may be interrupted in a number of ways. Chilling the body surface, sitting around in a wet

bathing suit after swimming; cooling off too rapidly after exercise, especially in winter sports; long, tiring automobile rides; all these forms of exposure lower the surface temperature of the body and slow down ciliary action. In addition, water entering the nose during swimming or diving dilutes or washes off the protective film of nasal mucus or may enter the sinuses and remain there, causing the epithelium to swell or become irritated and exfoliate areas of cells. Lack of moisture in the air, as in houses with steam or hot air heat lacking water-pans for evaporation, or exposure to hot winds in periods of drought, or to heat in fire-rooms of industrial plants, inhibits ciliary action and mucosal defense by excessive drying of the surface.

The influence of various proteins and physical stimuli upon nasal defense through their effects upon the sympathetic system, known as allergy and often referred to as hay fever, is not thoroughly understood. Every physician should be familiar with the appearance of the somewhat characteristic pale, boggy mucosa of allergic individuals, and with the fact that eosinophile cells may usually be found in the nasal secretions of these persons. The firm, red swelling of luetic round cell infiltration cannot be confused with the transitory edema of allergy. While the obvious case with asthmatic wheezing, red eyes and watery nasal discharge is easy to identify, we must recall that long-standing blockade of the nasal sinuses by allergic swelling favors purulent infection and that true inflammatory sinusitis may result. A careful history, followed by the intradermal use of microscopically pure proteins in a series of tests for pollens, food stuffs, animal emanations, and occasionally bacteria secured by differential culture from the nasal secretions or the stools, will generally reveal the source of trouble which may then be avoided or made use of for protective inoculation at the hands of a competent specialist in allergy. Even cold and heat will stir up allergic reactions in certain hypersensitive individuals. Obviously no type of local treatment, whether medicinal or surgical, will do more than afford transitory relief for such people. Adrenalin is a life saver for the severe case. Ephedrin, helpful at first, becomes an irritant if overused. Surgery should be limited to the restoration of proper calibre to the nasal passages by thinning down septal deflections; the turbinates should not be slashed out; and, unless bacterial allergy be due to gross infestation of the depths of sinus membranes, the sinuses should merely receive proper aeration and drainage rather than radical measures.

Acute sinus inflammation is characterized by swelling, increased vascularity and an increase in the number of tissue phagocytes (histiocytes); later, patchy loss of epithelial cells, accumulation of histiocytes at such areas, and arrival of polymorphonuclears and round cells. Much edema may occur, swelling up the sinus ostium and interfering with the exit of mucus, thus causing pain. Sinus secretions become thickened and are filled with extruded phagocytes and exfoliated epithelial cells. Healing shows a change of the histiocytes to fibroblasts and disappearance of polymorphonuclears, with some fibrous thickening of the submucosa and regrowth of ciliated epithelium over eroded areas.

Should the inflammation continue a long time, various types of saprophytic organisms will grow in the retained mucopus within the cavity. Enormous thickening, amounting to myxomatous degeneration, occurs and often the bony box of the sinus can no longer contain the swelling, which pushes out into the nose under the middle turbinate in the form of polyps. Beneath areas of broken down epithelium plasma cells accumulate, as in all forms of chronic inflammation elsewhere; and highly toxic germs may be found in the depths of the submucosa. Hyperplasia of serous glands may lead to cysts or to small abscesses scattered through the depths of the stroma, and these often do not discharge into the sinus cavity but release their toxins into the much-increased vascular network. Infected phagocytic cells may carry germs by the lymphatics to cause deep cervical adenitis and sepsis.

It is now not so fashionable as it was a few years ago to blame the sinuses for most of the damage done by so-called "focal" infection. It seems that the teeth and tonsils are the major sources of upper respiratory sepsis. Many sinus membranes are, however, found to exhibit numerous focal abscesses in broken down glands of the submucosal stroma; in a small number it is possible by special staining to demonstrate bacteria in the depths of the membrane.

The end results of chronic sinus disease are familiar to all—degenerative changes in sinus mucous membranes, loss of cilia, and fibrosis of the submucosal stroma. Upon such unclean membranes mucus piles up, leading to secondary saprophytic invasion, while the mucus dries into crusts and scabs and ulceration or fissuring occurs, with shrinkage and atrophy of the submucosal tissue. Locally, then, we have degenerative changes which may reach the stage of ozoena, with accumulation of foul crusts down the throat. This drying process and constant irritation from infected discharges first brings hyperplasia of lymphoid follicles in the pharynx, later the dry, shiny and burning throat of chronic pharyngitis, often with scabs above the soft palate which cause much complaint. Similar changes occur in the larynx and trachea, with alterations in the voice and establishment of chronic cough. In the bronchi, about which clusters of enlarged glands are usually found at the hilus, chronic irritation even to the point of bronchiectasis may occur. Swallowed mucus and crusts, containing virulent bacteria as well as saprophytes, often pass the stomach and small bowel, and stool cultures will reveal streptococci of extreme toxicity infesting the colon in great numbers, or invading

the gall bladder or appendix. It will be seen that many cases of so-called "focal infection" are in reality transferred infections, resembling the active foci of arthritis, themselves virulent long after the initial focus of teeth, tonsils or sinus membrane has been removed. Invasion of the blood stream by bacteria or their toxins through the increased network of capillaries in the subepithelial stroma of the inflamed sinus wall and invasion of the lymphatic system by dead cells—tissue phagocytes slain in the line of duty and carrying within the vacuoles of their protoplasm germs still vicious enough to produce lymphangitis and glandular inflammation extending along deep pharyngeal chains away down into the mediastinum, are consequences of focal infection from the sinuses. Such infection varies, however, not at all from focal infection arising from the prostate, the uterine cervix, or the appendix, and its control, when once established in the final capillary networks of the iris and ciliary body and elsewhere, lies with the immunologist in collaboration with the otolaryngologist, orthopedist, gynecologist or urologist who attacks the local source of trouble.

Most troublesome to many sufferers are the headaches and neuralgias due to nasal infections. Locations of such pains are rather characteristic; maxillary sinusitis, the forehead over the eye; frontal sinusitis, on pressure below the inner end of the eyebrow, referred up to the parietal region, usually in the forenoon; ethmoiditis, as if the eyes were being pressed apart; and sphenoiditis, referred to the occiput, shoulder and especially the mastoid region of the affected side. Nasociliary neuralgia, due to blockade of the nasofrontal duct by septal deviation, small bony tumors or fractures of the nose, is felt in the same regions as frontal sinusitis. Conditions causing inhibition of proper vasomotor control through the sympathetic system, often referred from distant regions through the sympathetic plexuses to the sphenopalatine ganglion, may be due to uterine malposition or enlargement, especially retroversion or increased size and weight due to fibroids or old endometritis or (in association with attacks of mucous colitis) to glandular hyperplasia of the large bowel, often associated with sacculation and the retention of fecal masses. Herein are included and associated many cases of endocrine dysfunction, notably hypothyroidism.

The prophylaxis of sinus disease should be well understood by every physician. Remembering the nasal mucus, ciliated epithelium and subepithelial connective tissue stroma as our lines of defense, we must preserve the functioning of these mechanisms. We must avoid sudden or long-continued lowering of body temperature by exposure—long rides, winter sports, swimming and diving. Sitting around in a wet bathing suit lowers body temperature one-half degree an hour. Driving home in a wet bathing suit with hair damp from swimming or after a warm shower with plenty of drinks in the locker-room when tired out from thirty-six holes are responsible for a lot of trouble. Swimming teachers now insist on proper breathing habits—inhaling through the mouth, exhaling through the nose—and people who have not learned to keep water out of the nose should not dive or swim with the crawl or side stroke. Washing away the protective mucous film, water may carry harmful bacteria from the highly vascular and resistant breathing spaces deep into the sinus cavities whose resistance to infection is low. Retained water in a sinus, as in the eustachian tube, leads to edema and loss of epithelial cells and favors germ invasion and ear involvement.

Drying up of cilia by lack of humidity, as in overheated buildings lacking water-pans, or during periods of hot dry winds increases the vulnerability of individuals not only to their own germs but also to those of others suffering from colds or sinus disease. This change is especially bad when people must go outdoors from school, office or factory into raw, cold or windy weather. Mild oil drops or sprays are a helpful protection at such times.

Dietary prophylaxis should include the avoidance of excessive carbohydrate intake and the inclusion of sufficient leafy vegetable material and fruit to maintain regular bowel evacuation. The salt-free diet has no effect on sinus disease; diets should be well balanced and plentiful.

Dental prophylaxis should obviously include close scrutiny, electrical testing and roentgenograms of all dead, crowned, crowded or otherwise suspicious teeth whose roots may adjoin the maxillary antrum.

Persons with narrow or obstructed noses should be given free and open nasal breathing, by operation if necessary. Septal twists or thickenings, especially those obstructing the nostrils or pressing upon the middle turbinates, should be restored to normal position and thickness in persons with recurrent sinus disease. Occasionally in allergic persons the presence of great swelling of the turbinates and of polypoid growths occluding the nasal cavity may dam up sinus drainage so that secondary purulent involvement of the sinuses occurs. In such cases not only must the allergic irritant, whether house dust, animal emanations, food or pollen, be identified and avoided; sensitiveness to predominant bacteria from the ethmo-sphenoidal region should be determined; and under no circumstances should the warming and moistening function of any of the turbinate structures be ruined by their removal.

Differential diagnosis respecting sinus neuralgias must exclude pain from the first and second trigeminal branches, darting from their foramina at the inner end of the eyebrow and the middle of the cheek, to the vertex or the mandibular joint, or referred as a result of crowded, carious or undescended teeth to the region of the ear. True migraine may occur as a result of toxic absorption

from the sinuses, but is far more frequently due to vasomotor disturbances in the basal ganglia of the brain set up by circulating toxins or allergens absorbed from the digestive tract; it is usually transitory and accompanied by eye symptoms or nausea. Dull forehead pain may precede the eruption of herpes zoster, but sensation is disturbed or lost.

It is easy enough to locate nasal infections which are pouring pus into the nose forward under the middle turbinate from the frontal or anterior ethmoid, backward under the middle turbinate from the maxillary antrum, or behind the end of the middle turbinate and down the side of the pharynx from the posterior ethmoids or sphenoids. Use of many handkerchiefs and much hawking and spitting are obviously suggestive of cavity involvement; fourteen or fifteen square inches of mucosal lining can excrete a lot of pus in a short time. Every resource of the specialist is, however, needed to prove the existence of cysts or blind empyemas without discharge. Careful shrinking of the nose with weak adrenalin and cocain pledgets, followed by instillation of lipiodol while the head is reversed (nostrils upward, chin vertical to the external ear canal, mouth open), will by the use of mild suction draw the lipiodol up into remote cavities if they are open at all. If not, the roentgen ray will show thickened or polypoid linings.

What shall we do for people with nasal infection? In acute cases relief of pain may require opiates, sodium amytal, luminal; nasal drainage must be restored by careful shrinking under the physician's eye—cocain 5%, or pantocain or metacain 2% aided by adrenalin 1:1000, used sparingly and not allowed to run down the throat; drainage of accumulated pus by careful suction, avoiding forcible syringing or douching because of the danger of ear involvement. Most people like hot applications or diathermy on the face; but, especially where external swelling has started in acute frontal or ethmoid suppuration, ice bags are most grateful applications. Aqueous ephedrin, not more than 1%, or oily ephedrin, not more than ¼ to ½%, may be used by instillation into the nostrils with head reversed, mouth open, with mild suction, and not more than three or four times daily so as to avoid irritation of the alae nasi. Ephedrin carelessly used may cause disagreeable lowering of blood pressure in elderly persons. Sprays only reach as far as the center of the middle turbinate, hence we prefer treatment by the dropper method with the head kept reversed for several minutes while the mouth remains open and the soft palate closes the nasopharynx. Most of the surface antiseptics are too irritating for nose drops; all must be freshly made. Silver protein compound 10-20%, mercurochrome ½%, merthiolate or metaphen 1:5000, are strong enough.

Dietary measures have received much study and popularization by writers for the laity of late years. Aside from simple measures of alkalinization (orange juice and sodium bicarbonate, or the various effervescent alkaline compounds), it seems proper to state that no proof exists that any special dietary, whether alkaline, acid or salt free, will help nasal infection in the slightest degree. A well-balanced diet containing all essential elements, including the leafy vegetables and salads which are often neglected in American kitchens, will carry along one's resistance better than any of the potash broths or tasteless, salt-free gruels advocated by newspaper columnists or medical faddists with books for sale.

This does not mean that children or invalids whose dietary has been notably deficient should not have the deficiency remedied by the inclusion of appropriate vitamins and fats; and it is true that many people tear down their resistance by overindulgence in carbohydrates—biscuits, hot cakes and syrup, flour gravy—where they should have wilted lettuce or even the beet greens and "pot likker" beloved of southern politicians; not, however, too much corn pone and black strap molasses!

Bacteriological treatment, the use of autogenous vaccines, we have found helpful in a good many people infested with various types of hemolytic staphylococci and streptococci. It must, however, not be forgotten that many sorts of germs, including b. coli, have been found in pure culture in infected sinuses. For this reason the action of stock vaccines and even of 1% peptone solution, which we have lately demonstrated to produce the same acute round-cell and tissue phagocyte invasion of infected sinus membranes as does autogenous vaccines, probably will do just as much good in stirring up the dormant membrane laden with plasma cells toward proper healing. If vaccines or foreign protein be used dosage should begin at the minimum and be increased very slowly to avoid danger of serum sickness from excessive accumulation of antibodies, thus throwing the patient into the "negative phase" with exacerbation of his original ailment. We have found that salts of the alkaline earths—calcium gluconate and magnesium sulphate—in a normal strength solution markedly stimulate the accumulation of tissue phagocytes and their metamorphosis into fibrous tissue under regions where the protective epithelium has been destroyed. Saline solution, however, tends to increase edema of the tissues, merely cleansing the raw surface without promoting healing.

Physical agents assisting in the healing of nasal infection include increased circulation by the use of diathermy or of carefully screened infra-red lamps. Therapeutic dosage with the roentgen ray, welcomed by those afraid to risk operative procedures, is only valuable where the inflamed membrane is full of round cells and has no focal abscesses or polymorphonuclear accumulations in its depths. Lymphocytes—small round cells—are killed by the roentgen ray as they are in the tonsil, and nature's effort to dispose of these killed cells leads to an immediate, sometimes painful,

swelling and inrush of tissue phagocytes, after which fibrous healing occurs. But in old membranes, already full of plasma cells, no repair effect takes place, and we have found that almost all chronic cases treated by the roentgen ray later require one or another form of surgical relief.

How about surgery? In acute infections, as little as possible. Rarely, after careful shrinking, one may wash the maxillary antrum through the natural opening or after cautious puncture by the Lichtwitz needle; or do very cautious and slow washing of the frontal or sphenoid with a thin flexible silver canula. Occasionally one is obliged to infract the middle turbinate toward the nasal septum to assist drainage from an acutely inflamed frontal or ethmoid; still less often, to incise the inner angle of the orbit, where a swiftly pointing frontal or ethmoid suppuration has broken into that cavity. Needling the young child's antrum is not dangerous, but one must remember that it lies high above the undescended front teeth.

Until a sinus has had the benefit of several weeks' conservative local treatment and careful study to eliminate any possible allergic factor, radical surgery should not be considered. Occasional emergencies, reactivation of a chronic condition by swimming, diving or exposure, may lead to acute osteomyelitis of the frontal bone, which brooks no delay and requires most radical removal of bone down to the dura and up to the limit of infection, occasionally to the hair line. Equally radical measures are required in fulminating orbital or optic nerve involvement. Thickening of membranes seen in the radiograph is never sufficient evidence to justify radical operations; clinical signs must be present and the swelling may be allergic.

If after three or four weeks of antrum washing the discharge remains milky or foul, disseminated through the wash water, little is to be gained by conservatism. A 5 mm. window trephined under the inferior turbinate assists drainage and makes washing the antrum easy; occasionally, a good sized window permitting aeration will give entire relief.

Discussion of the various radical procedures will not be undertaken; these are problems for the rhinologist. It should be pointed out that the frontal sinus and ethmoids lie in direct relation both to the orbit and the brain, and that extensions of these cavities horizontally over the orbit may reach the outer end of the eyebrow. Obviously it is impossible to secure complete drainage of such cavities by operation through the nose; the external approach is required.

Disease of the sphenoid is far more frequent than physicians generally realize. Vertigo, mastoid pain, and occipital headache, often preceding the menstrual period, resemble symptoms of other diseases and much time is lost in fruitless symptomatic treatment. Especially in cigarette smokers sphenoiditis is a frequent cause of chronic laryngitis and bronchitis.

Cases of severe disturbances to vision through infiltration of the neighboring optic nerve by toxins or germs are by no means infrequent. Much relief can be secured for these chronic sphenoid cases by careful cocain-adrenalin shrinking of the sphenoethmoidal recess, followed by postural instillation (head reversed) or gentle canula injection of ¼% phenol and 2% gomenol (oil of niaouli) in heavy paraffin oil.

Acute ethmoiditis and maxillary involvement are rather frequent in children. Removing adenoid obstruction may be all that is needed. Simple washing of the antrum, under gas, recalling its high location above the undescended teeth, is an easy matter. Chronic cases may require a small window, best managed by inserting a rubber drainage tube, which is well tolerated for a week or more and facilitates washing and the use of antiseptics. Radical operation on the sinuses of growing children should be reserved to those serious cases of systemic involvement which are sometimes, though rarely, causative of chorea, valvular disease, arthritis, or invasion of the orbit and optic nerve sheath.

If sinus operations have to be done on adults let them be complete and thorough, removing all infected membrane. After this has been done clean granulation tissue covers the denuded bone, and within a few weeks normal membranes covered by ciliated epithelium, usually somewhat thicker and more fibrous than before, will be found lining the operated cavity.

Such healed sinuses are equally vulnerable to the same causes of disease; colds, exposure, indiscretions of diet, excessive smoking may stir up the same damage in the new-grown sinus membrane as in normal membrane. It must be admitted that cutting away the bulk of the ethmoid, with sacrifice of the middle turbinate, may lead to dryness due to excessive room and the formation of scar tissue not covered by normal epithelium. Under such scars exposed nerves will sometimes be found very sensitive to sudden weather changes, dust and other irritants. In the main, however, sinus patients who have had radical operations are sincerely grateful for their relief from constant discharge, headache and general discomfort.

These statements are based upon much research recently published, some of which Professor Larsell and I carried on at the University of Oregon Medical School for the past three years through the generosity of the American Academy of Ophthalmology and Otolaryngology; and we are developing the role of the sympathetic system in protection against nasal infection through further work this year which the academy is generously sponsoring. May I suggest that many of our problems in nasal disease—those of infection by filterable viruses, of lowered resistance to germs already present, and of allergic sensitiveness require

not only much laboratory work, but especially most painstaking observation and early recognition by the general practitioner who first sees these cases. Many cases of serious nasal disease may be forestalled by proper habits of life and recreation, by maintenance of open breathing spaces, and by early attention to acute infections.

SIGNS AND PHASES OF CYCLOPROPANE ANESTHESIA*

FLOYD T. ROMBERGER, M. D.

LAFAYETTE

Conversation with and personal communications from those at present experienced in employing cyclopropane gas (C_3H_6) for major surgery, as well as the until-now publicized, clinical reports of the phenomena accompanying such anesthesia, tend to make it appear that a certain confusion of mind exists as to a distinctive interpretation of the physical signs and phases of the various anesthetic planes under cyclopropane in that they do not parallel with hairline exactness those guides usually accepted and followed when ether anesthesia is administered. This is but natural. Cyclopropane differs from ether. Cyclopropane differs from choroform. Cyclopropane differs, also, in action and effect, from nitrous oxide and ethylene. Yet, basically, cyclopropane is a potent anesthetic agent, capable of producing deep surgical narcosis. It is only reasonable to assume, then, that we must reorient our ideas in the visualization of the guide posts for the on-coming anesthesia with cyclopropane, in order that students, anesthetists, and teachers may have a more clear mind's-eye view of the direction signs along the highway which we propose to travel.

Toward the end, therefore, that students and teachers more easily may study and better may visualize for themselves the accompanying phenomena during the clinical application of cyclopropane, a schematic diagram of the clinical signs and phases of cyclopropane anesthesia is submitted. The graph is original in concept. It is novel. It is simple. Basically sound, it is clinically correct. Superfluities purposely have been omitted. Readily understood, it is a positive, certain, and reliable guide to the varying depths of cyclopropane anesthesia attainable or desired.

Before proceeding with a study and/or explanation of the diagram, let us first divest our minds and consciousness of a few seeming absurdities which have been and are at best of naught but academic interest. To divide the induction phase of anesthesia into two or more stages, such as an excitement stage and a stage of muscular rigidity, certainly is superfluous. As a matter of actual and practical clinical fact, what one does is to take a patient who is awake and, by means of the anesthetic agent, put that patient down into narcotized sleep to such a degree that surgery may be performed. That, simply, is all there is to the maneuver. Hence, in cyclopropane, as with all anesthetic agents, an induction phase easily should suffice. Yes, know when the patient is awake and, equally important, also know when that patient first arrives at the point of early (light) surgical anesthesia.

Almost the same remarks could be made concerning the arbitrarily dividing of the so-called third-stage anesthesia into four different planes. This may be and usually is reasonably possible with the relatively slowly effective drug ether; but, with the swiftly and powerfully acting cyclopropane gas, in the matured opinion of anesthetists experienced in many thousands of anesthesias with all the commonly known agents, it is utterly beyond human perception. In fact, even those most extensively acquainted with cyclopropane anesthesia disclaim all ability to distinguish between third-plane and fourth-plane. However, it is absolutely essential to be able to recognize when the surgical anesthesia is moderate, when the anesthesia is relatively deep, and/or when one approaches the danger line of obliterative narcosis. This can be done.

Accordingly it is quite reasonable to assume that, the hazards being clear and the safeguards being understood, to divide the field of surgical anesthesia into but two phases, moderate anesthesia and deep anesthesia, should be ample both from the teaching viewpoint and from the vantage of safe and successful, clinical application. Nothing could be more simple. This also can be done.

A homely parallel should emphasize the point. In a certain mythical city, the distance from First Street (beginning surgical anesthesia) to Fifth Street (obliterative narcosis) is four city blocks. However, unaccountably, Second Street and Fourth Street are missing! What of it? The distance to be traversed (rapidly or slowly) remains the same! Provided you can read the signs, you will get there, or you can stop on the way. These signs are now presented in a logical sequence, remembering always and indelibly the basic fact that the patient is the index of the degree of anesthesia, not any pre-set volume or quantity, and not any fictitious or imaginary percentage. This admits no controversy.

To get the true, clinical visualization of the action of an anesthetic agent, the accompanying phenomena must be studied without adding other narcotic drugs before or during the administration. Hence, these signs were charted in cyclopropane-oxygen anesthesias in patients unmorphinized beforehand and without the preliminary use of barbiturates or other basal narcotics. Neither volatile nor nonvolatile anesthetic compounds were added during the narcosis. Nothing was permitted to distort the picture. The influence

* From the Anesthesia Departments, respectively, of the St. Elizabeth and Lafayette Home Hospitals.

of such synergistic drugs on the signs and phases will be discussed later, the changes being but minor. Nor was a soda-lime filter of any type used, as this too, by the partial or complete elimination of the carbon dioxide, would alter slightly the character of the findings. A straight cyclopropane-oxygen anesthesia was administered and the phenomena charted.

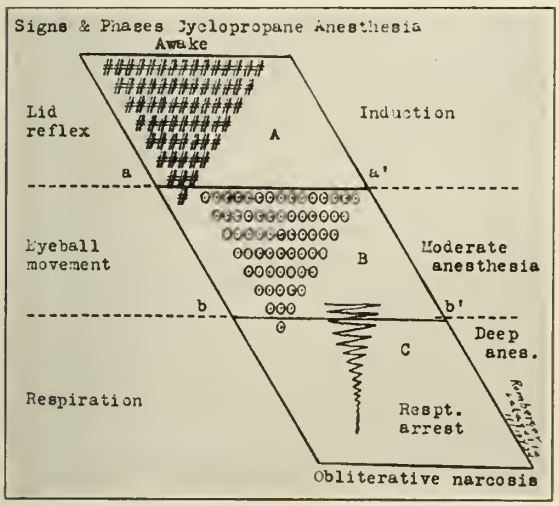


Diagram of signs and phases of cyclopropane anesthesia

Now let us examine the diagram. The entire field of anesthesia, from a patient awake to a patient in obliterative narcosis, is covered by three simple phases: induction (A), moderate anesthesia (B), and deep anesthesia (C). For each one of these phases is selected as guide a separate, time-tried, clinically proved, reliable sign, each sign as old as the history and the literature of anesthesia itself, each sign tested for accuracy in many millions of anesthetic administrations, each sign basically and physiologically correct. Why three different signs? One for each phase? Because no one sign available runs through characteristically from top to bottom! Certainly neither the respiration nor the pupil! Excepting in the very deepest anesthesia, these are inconclusive guides.

The originality of concept in this graph resides not in providing new signs, but rather in the novelty of their selection and arrangement, in the simplicity and certainty of their adaptation, and in the faithful exactness with which they occur clinically.

In phase A, induction, watch the activity of the lid reflex. When it slows to the point of absence (a—a^1), pain sensation disappears and early (light) anesthesia begins. Now, for phase B, moderate anesthesia, watch the eyeball. As its oscillation becomes less and less, to the point of cessation, central fixation (b—b^1), really deep anesthesia begins.

These two signs having served their purpose and being no longer available, the pupil being out of the picture because of variability of response in contraction and relaxation by the iris, it now becomes alertly necessary to observe the respiration (phase C) as the patient becomes deeply and still more deeply anesthetized. Watch the respiratory rate and the tidal amplitude. It may be questioned whether the average anesthetist possesses sufficient acuteness of perception to distinguish between respiratory movements purely and solely diaphragmatic and those of the intercostal, pectoralae, and other accessory respiratory muscles. But the rate and volume always are before the eyes in the excursions of the breathing bag. In phase C, the respiration, regular and machine-like in its rhythmicity though it usually remains, becomes quite shallow, and it continues to become more and more shallow and less and less frequent until it finally ceases. At this point, under a proper technique, the patient is still very pink, and the pulse usually is unaffected. As shown in the graph, respiratory paralysis occurs from an overwhelming effect of the anesthetic agent an appreciably measurable length of time before obliterative narcosis is reached. On lessening the cyclopropane percentage (increasing the oxygen supply) and with slight help by pressure on the breathing bag, respiration spontaneously is resumed.

Naturally, every experienced anesthetist must and will recognize that these phases blend into each other, as shown on the diagram.

In brief, the effect of the preliminary narcotics (morphine and the basal, nonvolatile agents) (and they should be used judiciously) is to contract or flatten out each field appreciably and to have the phases blend into each other more quickly. This may be noted especially in phases A and C respectively; i. e., the patient is surgically asleep markedly quicker, and the respiratory arrest comes on dramatically earlier. Minute discussion of these factors must await, as also must an interpretation of the effect of adding a volatile drug, such as ether.

Beware of and be not misled by physiologic idiosyncrasy. Several oddities may come in a row. Especially is this true of the pupillary reaction. Remember that the morphinized iris is difficult to paralyze and that added ether first causes stimulative dilatation of the pupil, then contraction, then full dilatation. Preliminary morphine and basal narcosis tends to stabilize and render the oncoming signs of cyclopropane anesthesia more readable.

Since it is self-evident that the signs and phases depend entirely upon the introduction of a narcotizing agent into the human organism, the placement of either the to-and-fro or the circle filter with soda-lime into the closed respiratory system does not modify these signs and phases, excepting only the character of the respiration. This is notably quieter, lessened in frequency, and more shallow in tidal flow. For other detailed effects, recent literature is available. Of course, the cost

of administration is reduced, because, in the absence of faulty or leaky apparatus, there is but slight wastage of anesthetic gas.

It readily can be understood that each paragraph of this thesis easily could be expanded into pages by detailed, argumentive debate, but such is not the purpose of the monograph.

It is hoped that this only too brief discussion of a simplified classification of the signs and phases of cyclopropane anesthesia, along with the presentation of an orginal visualization of the same by means of an easily remembered graph, the whole supported by time-tested, clinic-proved ideas, will be helpful to students, teachers, and clinicians in this field.

521 Lafayette Life Building.

VAGINAL HYSTERECTOMY*

ITS HISTORY, INDICATIONS, AND COMPLICATIONS

R. C. OTTINGER, M. D.
INDIANAPOLIS

Removal of the uterus by the vaginal route, though a procedure long known to surgery, has passed through many vicissitudes of popularity. At present it is not employed as often as it should be, in spite of the fact that many of the foremost gynecological surgeons of our own time have set forth its advantages by written description and clinical demonstration. It is not that any particular prejudice exists against it; rather, the wide range of abdominal surgery makes it more familiar to the majority of operators. When hysterectomy is to be done, it is the abdominal route which is considered to the exclusion of any other possibilities.

That the earliest surgical removal of the uterus should have been by way of the vagina is hardly surprising. The phenomena of parturition gave the earliest surgeons a better idea of the anatomical arrangements of this body cavity than of any other, and prolapse of the uterus was undoubtedly more common in the past than it is today, when better care and a generally higher level of intelligence have cooperated to alleviate some of the worst ills from which women formerly suffered. Soranus the Greek, who practiced obstetrics under the rule of the Roman Emperor, Hadrian, in the fifth century, is generally credited with being the first to suggest removal of the prolapsed uterus, but there is uncertainty as to whether or not any such operation was actually done during his lifetime. Aretaeus and Paulus Aeginata, a little later in the Roman period, also mention this operation in their writings. Still later, during the Middle Ages, when only the Arabians kept alight the the flickering torch of medical knowledge, the Mohammedan, Alsaharavius, about the time of the Norman Conquest in England, advocated that the prolapsed uterus should be removed through the vagina when it was found impossible to replace it.

* Presented before Surgical Section, Indiana State Medical Association, Indianapolis, October 10, 1934.

Commenting upon the Arab physician's advice, Green-Armytage, whose long experience as a teacher and practitioner of gynecology and obstetrics in the Far East makes his opinion of peculiar value, has said, "It is possible, of course, that these ancients who advised operation for prolapse may have been considering a case of chronic inversion of the uterus, or one of those large pedunculated submucous fibroma of the cervix or uterus which are so commonly seen in the East. But considering that Hippocrates, the Father of Medicine, 2400 years ago, described a case of procidentia which he saw 'hanging down like a scrotum between the legs of a woman,' I am inclined to think that the Arabian was the first to anticipate the modern operation."

This writer credits Volkamer of Nuremburg as being the first to undertake the procedure in what (in contrast to antiquity) may be termed "modern times." But Senn, basing his assertion on Paravens' *Opera Chirurgica* dating from 1594, gives the credit to Berengarius of Bologna, in 1507, more than a century and a half before Volkamer. This same historian also mentions that J. Schenck of Grafenberg "relates a number of cases in which the uterus was removed through the vagina in whole or in part by ignorant persons who had not the faintest idea as to the nature of the difficulty, or the extent and gravity of the operation." Wrisberg, writing in 1787, tells of a midwife who had inverted and prolapsed the uterus in her efforts to drag out the placenta. Believing the bleeding tumor which protruded from the vulva to be some sort of neoplasm or polypoid growth, she "seized a bread knife and cut it off."

In 1824 von Siebold supplied an anecdote somewhat similar. During a protracted and difficult labor "the attendants were surprised by the descent of a large tumor." As it could not be dislodged by traction, "the boldest of the fool women present seized a razor and cut it off." The tremendous hemorrhage which ensued was checked by cramming ice into the vagina, and the patient, no doubt, owed her eventual recovery to the fact that the weather was cold.

This accident bore unexpected fruit, however, for Wrisberg reasoned that if it were possible to hack off the uterus in this way without killing the patient outright, there should certainly be a chance to remove it when diseased, in accordance with a previously thought-out technique. He never carried out the idea himself, but it was owing to his influence that Osiander actually did the operation in 1801. By 1808, the time of first publication of Osiander's own work, he had removed the uterus through the vagina nine times. Prolapse remained the only indication. The idea of applying the procedure to the inverted or cancerous uterus did not manifest itself until some time later. However, it was not long before the idea of artificial prolapse entered the minds of surgeons struggling with gynecologic problems. Under favorable cir-

cumstances, a diseased uterus might be artificially prolapsed and amputated above the site of disease. In 1912 Palette, the Italian surgeon, removed the entire organ, although he had intended to do no more than a high amputation of the cervix, and was much amazed when examination of the specimen showed that all the uterus had been extirpated.

But the very next year, J. C. M. Langenbeck, of Gottingen, actually performed a vaginal hysterectomy very similar to that which is performed today in our foremost hospitals. His performance is really one of the most remarkable in the history of surgery, in that it was done without anesthesia or any knowledge of asepsis, and with practically no assistance, as another surgeon who attended the operation for that purpose turned out to be so crippled with gout as to be unable to rise when summoned to help stanch a rapidly rising hemorrhage. "The last part of the operation consisted in the subperitoneal enucleation of the uterine fundus. . . . With severe hemorrhage an approaching collapse of the patient, and no one to assist him, prompt action on the part of the operator became a matter of urgent necessity. With the left hand Langenbeck grasped and compressed the bleeding part, and with the right hand he passed a needle armed with a ligature through the tissues behind the bleeding point. Having only one hand at his disposal, the ligature was tied by grasping one end with his teeth and the other with the right hand. At this stage the patient appeared to be dying. Dashing cold water over the face revived her." The woman must have been, indeed, of heroic constitution, for she not only survived the operation, but by living for twenty-six years thereafter, prevented her surgeon from proving his claims to having removed the entire uterus, until she should "come to autopsy." In the excitement of concluding the operation, the removed tissue was thrown away; the non-functioning assistant, who was the only witness save the patient herself, died soon after, and the medical profession generally flatly refused to believe that Langenbeck had accomplished what he set out to do. The very fact that the woman lived so long in such good health, with no return of the carcinoma for which the hysterectomy had been undertaken, was regarded as refuting his claims. Finally, at the age of seventy-six, the woman passed away. Other younger surgeons performed the autopsy, and Langenbeck's description of his procedure was substantiated in every way by the postmortem appearance of the pelvic cavity. Younger members of the Langenbeck family—in which the practice of medicine seems to have been hereditary—gave the complete "case history" to the world, and the possibilities and reasonableness of vaginal hysterectomy were established.

The second complete extirpation of the uterus by the vaginal route was that done by Sauter in 1832. Billroth and others have mistakenly given Sauter the credit of being the originator of the modern practice of vaginal amputation, though records show that his procedure was carried out nine years after Langenbeck's. His case differed from Langenbeck's, however, in that the uterus was not prolapsed, and whereas Langenbeck had made a great point of not broaching the peritoneum, Sauter apparently did not fear to open it freely. More than that, he accidently opened the bladder, so that shortly after urine escaped by way of the vagina. The patient recovered from the immediate effects of the operation, but died six months later, though whether her death was due to poor surgery or recurrence of malignant disease we are not informed.

During the next ten years, twelve more cases are recorded, but there were but three recoveries—a mortality of seventy-five per cent. J. L. Faure, under the alluring caption "Will We Have to Abandon Vaginal Hysterectomy?" recently took up the history of the operation in France, where it was first done by Recamier, in 1829. "Thirty years ago," he tells us, "everyone would have been stupefied had they been asked such a question." After Recamier's time the operation was abandoned. Nobody thought anything more about it until 1875-1880, when Pean, the surgical genius of that epoch, again revived it as a means of removing fibromas without resorting to abdominal incision. Though Pasteur had then been busy with his studies and experiments for many years, and Lister had practiced his principles of antisepsis both in Scotland and England, Pean seems to have been ignorant of any practical application of these discoveries to his clinical work. He conceived the idea that it would be much safer to cut large growths into pieces and bring the fragments down the natural passage, than to throw the abdomen open to infection. Events proved him correct, and he soon attained so much skill in doing the operation that he was emboldened to try to accomplish ovariotomy by the same route. Removing the uterus was almost a part of this procedure. How successful Pean was can be estimated by the fact that his mortality was two per cent, while that of other surgeons of equal eminence who operated abdominally was twelve to twenty per cent or even higher.

From 1890 to 1900 there was in France—in the words of Faure—"a battle all over Paris, between the vaginalists and the laparotomists. The vaginalist said, 'The adnexa must be operated by way of the vagina, because this is a much less serious operation. You would cure far more patients; you would lose infinitely less.' To which the laparotomists responded that vaginal hysteretcomy was a blind operation, and patients who might have had their function preserved on one side were completely mutilated. In short, in vaginal hysterectomy one never knew what he was about. This discussion went on for a dozen years, not exactly between the vaginalists and the laparotomists, but between those who knew how to do vaginal hyster-

ectomy and those who did not. It was these last, who did not realize that they did not know how to do it, who kept up the controversy."

This author goes on to say, however, that with the introduction of aseptic methods, so that the mortality from laparotomy fell from twenty to five per cent, it became so much easier to perform hysterectomy by the abdominal route that the vagina was wholly neglected. That was why he was asking the question which was the title of his address, "Must We Abandon Vaginal Hysterectomy?" His answer was an emphatic negative, and it is of interest to study the indications which he believes still exist for the employment of this procedure, and to compare them with those of other advocates of this somewhat discredited operation. The reason for the desertion of the vaginal route for the extirpation of cancer was recently well set forth by Horsley. Thirty years ago it was the routine procedure for all types of cancer of the uterus, and was occasionally employed for other conditions, including uterine prolapse. The operation as then performed was usually done by leaving heavy clamps on the broad ligaments for forty-eight hours. It was considered that attempts to tie the broad ligaments were too uncertain and dangerous. No effort was made to close the peritoneal cavity. This operation gradually went into disrepute, not only because of the suffering and mortality, but because of the recurrence of carcinoma.

The use of clamps has only recently been done away with, if we are to believe the pronouncements of Raymond Petit, French surgeon, whose writings were published in this country a few years ago. "Having been trained to consider vaginal hysterectomy with the use of clamps favorably," he writes, "we came soon to abandon this type of operation because (1) there is severe primary and secondary hemorrhage; (2) the fixed clamps and the macerated tissues which they leave to be eliminated create an ascending route of infection; (3) there is danger that the ureter, intestine or omentum might be grasped by clamps applied without visual control; (4) there is absence of peritonization with resultant adhesions; (5) because the vaginal route is the natural and logical one and has the added advantage of much less operative shock than occurs in abdominal hysterectomy, he set about devising a better technique."

This author gives as indications for vaginal approach: *Advanced age, cachectic condition,* because of the smaller amount of operative shock to patients weakened by age or long-continued bleeding; *fibromas* located low, and not of too great size; *total prolapse after the menopause;* (he forms a support for the peritoneal cul-de-sac in these cases by suturing together the round, and if necessary, the broad ligaments in the median line below the closed peritoneum.)

The contribution of Wayne Babcock, which is the latest I have seen on this subject, likewise condemns and abandons the use of clamps, and to this simplified technic he attributes the reduction of his mortality from four to one-half of one per cent. He regards the chief indication for this procedure as hemorrhage and tumor. Over eighty per cent of fibroids brought to his clinic are removed through the vagina. Forty-three hysterectomies were done for hyperplastic or fibrotic uteri without tumor, having as the most common symptom excessive hemorrhage about the time of the menopause. He adds that we can practically eliminate the mortality from vaginal hysterectomy, and he believes that he has accomplished just this, "then it may properly compete against the use of diagnostic curettage and radium, on the bases that it more surely eliminates the possibility of lurking or of later malignancy, and that it is not followed by relapse or radium neuritis."

Horsley thinks vaginal hysterectomy is "sometimes indicated" where the cancer is high in the cervical canal, but when the cancer is in the body of the uterus "it is the ideal operation." In metritis, with persistent bleeding which is not malignant and not controlled by radium, such as from arterio-sclerosis of the uterine vessels or recurrent hemorrhagic endometritis, this operation is indicated. In cervicitis with erosion and old lacerations when combined with uterine displacement or moderate hypertrophy, vaginal hysterectomy is a satisfactory operation. When combined with plastic procedures it is the best operation for most cases of uterine prolapse. In cancer of the body of the uterus or in infections of the uterus, when the organ is drawn through the abdominal cavity in abdominal hysterectomy, in spite of the greatest care there is always the possibility of implanting cancer cells or bacteria along the route from the vagina to the abdominal wall. . . . Traction is made downward in vaginal hysterectomy and over intact mucosa and skin. The stump of the broad ligaments are drawn downward toward the vagina, and their lymphatic drainage facilitated in this way."

Working among the teeming millions of India, Green-Armytage encountered a set of indications which differ somewhat from those found in dealing with European or American women. Out of 150 vaginal hysterectomies, 36 per cent were done for fibromata, as he employed this route for any that were "larger than a cricket ball." Most of the patients were multiparae, with lax pelvic diaphragms and capacious vaginas. He found that in the tropics the usual palliative measures employed in Europe—electrotherapy, radium, or x-ray —even when available, do not seem to give as good results as conservative surgery.

Summing up the indications for vaginal, rather than abdominal hysterectomy as at present accepted, we find a general agreement upon hemorrhage, especially in the menopausal period: fibromas of moderate size in elderly or enfeebled patients; certain cases of postpartum atrophy and septic

abortion (Werner); early carcinoma when it is still confined to the uterus, and has not invaded the parametrium, cervical and in those patients who have suffered prolapse, or are so enfeebled as to be unable to withstand a severe operation. Babcock emphasizes the advantages of vaginal hysterectomy "in the presence of hemorrhage and infection. Hemorrhage during operation is better borne by the patient subjected to vaginal than to abdominal hysterectomy." This surgeon also states that "Owing to the slight tendency to peritoneal infection or shock a vaginal hysterectomy has a lower mortality than a supravaginal hysterectomy, and a distinctly lower mortality than a complete abdominal hysterectomy. In the treatment of hemorrhagic conditions of the uterus in middle aged women, it gives a mortality about as low as that of radium, without the sequelae and relapses of the latter and with greater assurance of disclosing and eliminating a possible malignant condition."

Other indications are carcinoma of the fundus, intra-uterine polyps, senile pyometra hypertrophied, cystic degenerated cervices with or without malposition, especially above forty years, sub-involution, prolapse with large cystocele, high multiple laceration of cervix with infection, and the long standing chronic endocervicitis.

TECHNIC OF OPERATION

The technic of the operation as practiced today varies somewhat according to the practice of the individual operator, yet on the whole it has undergone as little alteration through the century and a quarter of its existence, as any surgical procedure of an equal antiquity. Langenbeck began by dissecting the vagina from the cervix, continuing the dissecting until the peritoneal envelope of the uterus was reached. He avoided opening the peritoneal cavity by directing the edge of the knife against the uterus and separating the tissues as far as this could be done, with the handle of the scalpel. In order to reach the uterine fundus, he divided the broad and round ligaments and the Fallopian tube; the fundus was then enucleated from the subperitoneal tissue. The vagina was next pushed upward by introducing the whole hand. Above this had been formed a deep pocket, the walls of which were the peritoneal covering of the removed uterus. As he had studiously avoided traumatism, this peritoneal envelope vagina and peritoneal "bag" were continuous, and into this a sponge was inserted to prevent the pressure of the intestines behind from entirely collapsing it.

Sauter, as we have already seen, not only opened the peritoneum, but made a hole in the bladder wall. The disasters of this case led him to make these suggestions for the benefit of surgeons who should come after him. Patient in horizontal position (his had been upon an obstetric chair); complete evacuation of rectum and bladder; pressure by assistant's hand above the pubes in the direction of the pelvis; incision of vaginal vault between uterus and bladder with a knife having a short convex blade; enlargement of this opening around the whole cervix with the same knife; section of the broad ligaments close to the uterus with curved scissors, guided by the fingers; separation of uterus from rectum with curved scissors, at last bringing down the uterus with whole hand and separation of remaining attachments. Recamier modified Sauter's procedure by ligating the uterine arteries in the lower part of the broad ligaments before dividing the ligaments higher up. He brought the uterus down by grasping it with two tenaculum forceps, a decided improvement over the older method of plunging in the entire hand, freely slashing vulva and vagina if they chanced to be too narrow to admit it.

The most recent technic veers away from the clamp method. Werner of Vienna uses small curved clamps during the separation of the uterus from the adnexa, but says, "Generally two or three clamps are sufficient." Petit of Paris and Babcock of Philadelphia use no clamps at all. Petit claims that the dangers of hemorrhage and ascending infection, drawbacks of the earlier operation, are obviated when clamps are done away with. Babcock says, "The sloughing, the odorous discharge, the tendency to hemorrhage which follows the use of clamps, are largely obviated." Petit reverts to Langenbeck's original method, his operative work being entirely extraperitoneal, though the peritoneum of Douglas' cul-de-sac is opened at the beginning of the dissection.

Carried out by modern methods, with strict attention to detail, this procedure has few complications and seldom any serious post-operative mishaps. Horsley did 73 cases in 6 years with no deaths, and no serious complications except two vesico-vaginal fistulae. Petit's 123 cases were all carried out without a single operative death. One woman had a double phlebitis, which was controlled with difficulty, but would probably have followed abdominal hysterectomy just as surely, owing to the nature of the fibromata for which the operation was done.

Werner gives no figures of immediate operative results. Of post-operative complications he remarks that operators who use silk for ligating the vessels may have complaints from the patients of slight bleeding or discharge weeks or months after. "In such cases the ligatures are shed toward the vagina and appear in the vaginal lumen, and the formation of granulation tissue follows. If this happens, the ligature ought to be removed, and the granulation painted with silver nitrate." In sixteen years Babcock did over three hundred vaginal hysterectomies with no deaths attributable to operation, though some of the cases of advanced malignancy of the uterus succumbed to recurrence. By the Wolf clamp method, he had four deaths in 107 cases, and a number of post-operative hemorrhages and localized pelvic infections. He felt sure that he could not have obtained a mortality rate

of less than one-half of one per cent by resorting to supravaginal or complete abdominal hysterectomy, as many of the women were old, often fat, and many of them very anemic from previous hemorrhage.

The writer's technic is as follows: After thorough preparation of the vagina, thighs, pubis, and rectal area, using soap, water, bichloride solution, drying, iodine and alcohol, the cervix is first caught with tenaculum forceps and forcefully drawn downward, making taut the anterior vaginal wall. An incision is started (in cases not having large cystocele) in mid-line anterior and above cervix, this is extended downward and backward around the cervix, continued around to right side where it is directed forward and upward to join the primary incision. By blunt dissection the cut tissue is pushed upward all around. An incision is next made transversely across the cervix through vesico-vaginal fascia, the bladder is then pushed upward by blunt dissection, the uterine vessels are next ligated on both sides, and then the vessels divided. These cut vessels are then pushed upward. The peritoneum anteriorly is next opened and the fundus of the uterus brought out through the incised opening in the peritoneum; this is followed by opening the peritoneum in cul-de-sac; tubes are now ligated (state reason) and then a large clamp is passed from below upward, grasping left broad and round ligaments, which are divided close to the uterus; the right broad and round ligaments are now grasped in large forceps as was the left side. The ligaments are divided close to the uterus which frees it. A purse string suture is used to close the perineum in such a way as to leave all cut surfaces, blood vessels and ligated tube ends outside the peritoneum. The broad and round ligaments are next sutured together, making a support for the pelvis and at the same time controlling bleeding. All other bleeding points are controlled, and the vaginal wall is closed; a No. 2 plain catgut, full tube, doubled and knotted, is used for continuous closing of the vault.

Following the hysterectomy a perineorrhaphy is done, suturing together the levator muscles and perineal fascia. This technic is sufficient except in cases of severe cystocele with prolapse, and rectocele, which demands a different technic for support of the bladder. In such cases the incision is made at about the junction of the urethra and bladder, the primary incision going through mucosa only anteriorly, the lateral incision and posterior incisions being as before described. The next step is the division of the vesico-vaginal fascia above the cervix and by blunt dissection with a pair of scissors this fascia is freed from bladder up to urethra; this is then divided from below upward and this fascia is freed from bladder on either side up to the rami of the pubes. The hysterectomy is then completed as before described up to suturing of the broad and round ligaments together, at which point chromic No. 2 on round needle is placed through the vagina over left rami of the pubis, through fascia, over it, and through vesico-vaginal fascia, then through the sutured round and broad ligaments and again back through vesico-vaginal fascia and back through vaginal wall below the rami; a second suture is likewise placed on right side, and a third is placed through sutured round and broad ligaments, each end being sutured separately through vesico-vaginal fascia and mucosa at apex of incision anteriorly. These mattressed sutures when pulled taut cause the bladder to disappear. The vesico-vaginal fascia is next plicated over these supports and the anterior vaginal wall closed.

It is necessary to be very careful about bleeding, as severe oozing is apt to defeat the purpose of the operation. With large rectocele it is necessary to reconstruct the fascia anterior to rectum before approximating the levator ani muscles and perineal fascia, otherwise a good result would not be obtained.

Series of cases: fibroids, prolapse, plus chronic pelvic infection, hydrosalpinx, cystic ovaries, one case bilateral pus tubes-drainage, beginning carcinoma of cervix, cancer of body of uterus, and dermoid cysts.

CONCLUSION

In conclusion, it is interesting to cite the figures compiled by Bauer as to convalesence in 150 selected cases of vaginal, supravaginal, and total abdominal hysterectomy. Without resort to the details of his tabulation, his conclusions may be quoted: "It is safer to remove the uterus by vaginal hysterectomy when it is possible to do so. No deaths occur in this group and there is definite decrease in the morbidity." The morbidity was 10 per cent in the vaginal cases, 12 per cent in the supravaginal, and 22 per cent in the total abdominal hysterectomies. None of these cases included in this study were malignant or showed pelvic inflammation, and none of the patients has any physical defects making operation peculiarly hazardous, so the comparison seems a just one as to the real superiority of the vaginal procedure.

508 Hume Mansur Building.

DISCUSSION

THOMAS B. NOBLE, JR., M. D. (Indianapolis): The author's understanding and use of the vaginal hysterectomy have well warranted his position on this program. In collaboration with him, I wish to lay emphasis on a few features of the technic of the operation already mentioned in the paper.

The operation is improperly named. After the vaginal removal of the pathologic organs, the real work begins. The hysterectomy then becomes merely a means to get at the eight ligaments, or structures, with which repair and restoration are

accomplished. The first step, of great importance in eliminating peritonitis and in securing a perfectly smooth pelvic floor (as seen from the inside), is the suture of the peritoneum.

Next, as mentioned by Dr. Ottinger, the utero-ovarian, round, broad, and utero-sacral ligaments must be sutured together across the midline, extraperitoneally, of course. This makes a body upon which the bladder suspension may be made, and which actually reconstructs a lower abdominal diaphragm.

A third point must be made, that in almost all of these cases the perineum must be dissected and the pillars of the levator-ani brought together in a proper manner to give support to the rectum and to the preceding steps of the operation.

In Indiana, there has been a quiet questioning as to the preference between abdominal and vaginal hysterectomy. Looked at solely from the viewpoint of pathology, anatomy, and postoperative pathologic physiology, this question is unscientific, unreasonable, and shows a woeful lack of care in the study of any case in question. There can be no choice between abdominal and vaginal hysterectomy. If one is indicated, the other is contraindicated. It is impossible to do the same operation through the two distinct and separate routes. Arguing against this operation, therefore, does incalculable wrong to the reputation of proper surgery by promoting the tragedy of an improperly treated patient, and need of repeated surgery. It is not radical nor unkind to believe that one should refrain from practicing gynecology if not properly versed in the use of vaginal hysterectomy.

As regards statistics, for several years my own experience has been that sixty per cent of all hysterectomies are vaginal, one per cent midline, and thirty-nine per cent McBurney. The whole list of uterine, tubal and ovarian pathologies have been properly handled through the vaginal route, including carcinoma of the cervix and fundus, fibroid tumors, dermoid, apoplectic, and other cysts, ectopic pregnancies, and so on.

Through the vagina the appendix has been removed in about twenty per cent of my own cases, and in several instances it has been necessary to plicate the ileum to cover raw areas that have been adherent to inflammatory pelvic adhesions. This merely shows the adequacy with which pathologic states may be met through the vaginal route.

In a recorded series of 232 conservative, unselected cases in my own hands, there has been one death. The integrity of the bladder and ureter has been preserved, the postoperative morbidity as regards any physiologic defect, hernia, failure to secure support, etc., has truly been zero. So it seems conservative and true to hold to the proper regard for the use of vaginal hysterectomy, as has been so ably expressed by Dr. Ottinger. He should be applauded for his work and leadership in establishing proper surgical technics in gynecology in Indiana.

RECENT ADVANCES IN THE TREATMENT OF PULMONARY TUBERCULOSIS*

RUSSELL S. HENRY, M. D.
INDIANAPOLIS

The recent advances in the treatment of pulmonary tuberculosis are not due to the introduction of new procedures, but rather to the refinement of the technic of the procedures originated ten or more years ago. Some had been almost abandoned until the last few years because of the bad results. There has been a remarkable advancement in the standardization of the procedures in the various types of cases. Another very important recent advancement is the improved x-ray technic and interpretation of chest films enabling us to diagnose tuberculous cases in the minimal stage. The majority of minimal cases give no physical signs. When found by physical examination alone they are usually in the moderately advanced stage. The x-ray (preferably stereoscopic) is a very valuable aid in the treatment of every case of pulmonary tuberculosis. It is very important to know the type or types of lesions present, size and location of cavities if present, and the altered mechanics of the chest to be taken into consideration in mapping out a program of treatment which is impossible with accuracy, without the aid of a good x-ray film. That school of physicians which was of considerable size about 1920, and which considered physical examination sufficient and the x-ray not important, has dwindled to a mere handful.

We still have no chemicals or biologics that will cure tuberculosis. We still are depending upon the one specific, "rest," having put into the background the importance of the older favored treatments such as over-feeding with milk and raw eggs, having patients sleep in the open in subzero weather, and having them change climate.

Until six or eight years ago, the most prevalent method of instituting rest was to put the patient to bed for one to five years. Bed rest, of course, causes the patient to breathe fewer times per minute, lessens the blood flow through the lungs thus reducing toxic absorption, and reduces the energy used in muscular activity, giving the patient a much better chance to wall off the active tuberculous process.

In spite of rigid bed rest treatment, many minimal and moderately advanced cases, especially the latter, progressed to the far advanced stage. Because of this fact, procedures to further facilitate rest to the part of the body involved have been developed. Just as the operative procedures to immobilize tuberculous joints gained prominence over the long-continued use of casts, so has collapse therapy gained prominence over bed rest treatment alone. The purposes of collapse therapy

* Presented before the Section on Medicine of the Indiana State Medical Association, Indianapolis session, October 10, 1934.

in pulmonary tuberculosis are threefold—to rest the lung, to collapse cavities, and to lessen the blood flow through that lung, thus reducing toxic absorption. It is well to know that tuberculous patients who have cavities have poor prognosis. Dr. Barnes in 1928 showed, in a review of 1,454 cases without collapse therapy, that eighty per cent died within one year after admission to the tuberculosis sanatorium. Eighty-two per cent had died within two years, ninety per cent within five years, and ninety-five per cent within fifteen years.[1] Dr. Lawrason Brown[2] shows that forty-one per cent of the cavity cases are dead in five years on medical treatment only. It is well known that those patients with a prolonged positive sputum have a poor prognosis. We also know that approximately ninety-nine per cent of the cases with cavitation have positive sputum. It is very evident, therefore, that the fundamental purpose in the treatment of pulmonary tuberculosis, in addition to resting the lung, is to close the cavities with the procedures best adapted to the case. Cavity cases also are subject to pulmonary hemorrhage, have toxic absorption from secondary infection that is always present in cavities, and increased activity of the lungs in coughing which is certainly contraindicated in pulmonary tuberculosis.

Those cases without cavitation and the early cases with thin walled cavities should be given a trial of at least six weeks' absolute bed rest. A six- to eight-pound sandbag is sometimes helpful when placed on the affected side. If no improvement is had, collapse therapy should be considered. Determining whether the patient is getting better or worse is best shown with comparative x-ray examination as an aid. Some cases of pulmonary tuberculosis progress from minimal to far advanced stage with little or no symptoms. Physical examination in the moderate and advanced stage with temperature and pulse records is of utmost importance.

The procedures that are widely used in collapse therapy are:

1. Artificial pneumothorax.
2. Phrenic neurectomy.
3. Extra pleural apicolysis.
4. Complete thoracoplasty.
5. Partial selective thoracoplasty.

ARTIFICIAL PNEUMOTHORAX

Artificial pneumothorax is the introduction of air into the pleural cavity with a needle inserted between the ribs. As the air is admitted, the lung collapses because of its own elasticity, providing the visceral and parietal pleurae are not adherent. The collapse is followed by fluoroscopic examination. As soon as the cavity is collapsed, the cough will diminish greatly and the sputum becomes negative for tubercle bacilli. The sputum will diminish markedly, the temperature will usually subside within a few weeks, the appetite will increase, and usually there will be a rapid gain in weight.

The ideal case for artificial pneumothorax is, of course, the one in which only one lung is affected and which has not shown a tendency to heal with bed rest alone. If the case is a unilateral one and has a cavity, it is in most instances advisable to institute artificial pneumothorax immediately. The mediastinum and heart are usually deviated to the affected side and diaphragm raised. Unfortunately, strictly unilateral cases are few. Until a few years ago it was considered radical to institute artificial pneumothorax when tuberculous disease existed in the contralateral lung. Today we do not hesitate in instituting pneumothorax in bilateral cases, providing the contralateral lung shows the lesions to be fairly well healed and involvement not too extensive. Because of the fact that the diseased portion of the lung has a tendency to collapse more easily than the healthy portion, it is possible to collapse the diseased portion and permit the good portion to function. This is known as selective collapse. By accomplishing the selective collapse, it is now a common procedure to institute bilateral artificial pneumothorax simultaneously, providing at least one good lobe is had on each side.

An average of 300 to 400 c.c. of air is given on the initial treatment. Two days later another 300 to 400 c.c. is given. From then on the treatments are given twice weekly until the amount of air taken to maintain the collapse desired falls below 250 c.c. The interval is then prolonged to such an interval that enables the patient to take between 200 and 400 c.c. each treatment. This interval is usually five days, then a week, ten days, two weeks and so on. When artificial pneumothorax is instituted for infiltration only, that is when no cavities are present, the collapse should be maintained for not less than twelve to fifteen months before allowing re-expansion. When a cavity is present, the collapse should be maintained for not less than two and one-half years, and better four years, to give the cavity a chance to heal before re-expansion. Re-expansion should be gradual, reducing the amount of air given at each treatment, giving the lung four to six months to re-expand.

When the pleural adhesions prevent the desired collapse, gradual increase in the intrapleural pressure will in many cases stretch the adhesions to the point where they do not interfere. It is rarely necessary to go beyond the neutral pressure point. In fact, it is dangerous to do so, since tearing adhesions many times results in tearing the lung, which is usually followed by empyema. Intrapleural pneumolysis or the cutting of the offending adhesions with a high frequency needle through a small cannula placed between the ribs observed through a thoracoscope passed through another cannula advantageously placed will change an in-

[1] *American Review of Tuberculosis*, October, 1928, XVIII, p. 422.

[2] *J. A. M. A.*, Vol. 103; No. 12, Sept. 22, 1934, p. 914.

effective pneumothorax into an effective pneumothorax in selected cases. Dr. E. Vernon Hahn and the writer have done intrapleural pneumolysis on two cases with excellent results. High pressure pneumothorax has very little advantage and is dangerous.

The complications of artificial pneumothorax are spontaneous pneumothorax followed by empyema, empyema by infecting the pleural cavity with the needle, air embolism (so called pleural shock is now thought to be air embolism), intrapleural hemorrhage, and pleural effusion. Pleural effusion can hardly be called a complication, since it is present in about seventy-five per cent of cases sometime during the course of the treatment. It is rarely of any consequence, but if it occupies one-third of the pneumothorax space it should be aspirated and replaced with air to prevent losing the collapse. A sample of the fluid should always be taken to rule out empyema.

PHRENIC NEURECTOMY

The second important procedure used in collapse therapy is the phrenic neurectomy which is resecting the phrenic nerve in the neck, thereby paralyzing the corresponding hemidaphragm, allowing it to rise well into the chest. The phrenic neurectomy has been too widely used, probably because it is too easily performed. A tuberculous lung shrinks as fibrosis continues. Since it is supposed to fill space enclosed by a rigid bony frame work, it strives for space. The result is that the mediastinum and heart are pulled to the affected side and the diaphragm raised. The contralateral lung compensates and makes up for the lost space by compensatory emphysema. It is with this in mind that the phrenic neurectomy was performed routinely on pneumothorax and thoracoplasty cases to permit the diaphragm to raise and make up for the lost space. Phrenic neurectomy is still widely used, trying it before other surgical procedures are performed to close cavities. Some enthusiasts, such as O'Brien of Detroit, used phrenic neurectomy even in minimal cases to institute rest to the lung. There are other writers who condemn the procedure completely. The indications for phrenic neurectomy are not universal, but it seems to me to be a very valuable procedure in some cases. My ideas as to the indications for the phrenic neurectomy are as follows:

1. Strictly unilateral lower lobe lesions with or without cavitation should have a phrenic neurectomy whether or not artificial pneumothorax is used.

2. Cases in which adhesions to the diaphragm prevent satisfactory collapse with artificial pneumothorax.

3. Far advanced cases with bilateral involvement, in which the trachea and mediastinum are retracted to the side with the most involvement and not suitable for other surgical collapse procedures.

When a phrenic nerve paralysis seems indicated to close cavities in which other procedures are possible, to give it a trial, a temporary phrenic nerve paralysis should be done. The effect of the phrenic nerve paralysis is not predictable and its effect can be tried without causing irrevocable paralysis. This is done by merely pinching the phrenic nerve and its accessories, if had, the width of the hemostat. This will cause a paralysis of the corresponding diaphragm for about six months. If it is well to continue the paralysis, this procedure can be repeated. If the desired effects are had the nerve can then be resected. To do a phrenic neurectomy that fails to give the desired result may rob the patient of a chance to have the advantage of the same procedure on the opposite side later when a combination with a pneumothorax or an upper thoracoplasty is indicated. It is much better to utilize the temporary phrenic paralysis until the results are determined.

THORACOPLASTY

The third procedure of major importance used in collapse therapy is the thoracoplasty which is the multiple resection of ribs to permanently lessen the capacity of the chest cavity on the affected side. At first the thoracoplasty was dangerous and very limited in its applicability, but has been built up by many modifications and changes in technic until its objectionable features and dangers are now comparable to other ordinary major operations. It is indicated when pneumothorax and phrenic crushing have been attempted with failure. It is only indicated in patients who are in fairly good shape; that is, the patient should be getting the better of the tuberculosis and not the tuberculosis getting the better of the patient. The results of the proper type of thoracoplasty on carefully selected cases are very gratifying but should not be expected to perform miracles. The patient must be in better condition than is necessary in performing pneumothorax or phrenic neurectomy. Roughly speaking, the patient should not have lost weight for at least two months previously, should not have activity on the opposite side but may have healed lesions, the pulse should be below 90 beats per minute, there should be an absolute lymphocyte count of not less than 1200 per cu. m.m., blood sedimentation should not show a vertical curve and should present a condition that will be definitely benefited by the procedure. The technic of thoracoplasty of today consists of the removal of fewer ribs in most cases but greater length of the ribs resected. The complete thoracoplasty is indicated whenever a five-rib resection is not sufficient. The complete thoracoplasty consists of the removal of a section of each rib, removing as much as possible of the first and second ribs, and the rest to at least the posterior axillary line. This is done in two to three stages, usually waiting two weeks between stages. The periosteum is stripped from the rib and the rib is cut as near the spine as possible. The complete thoracoplasty depends on the entire

chest wall falling in; that is, the cut ends approaching the spine, thus diminishing the lateral dimensions of that side of the chest.

The partial selective thoracoplasty is used when no more than five ribs need be resected to close the cavity. The incisions are made posteriorly, from the apex following around and to the lower border of the scapula. The scapula is freed to give good exposure. The periosteum is stripped from the third rib and at least half of it removed. The second is now accessible. All of the second rib is removed after stripping the periosteum, and then the first rib is removed. It is important to remove all the first and second ribs to allow the pleura, endothoracic fascia and the periosteum of the ribs to fall in with the lung. Then the fourth and fifth ribs are removed. The length of the third, fourth, and fifth ribs removed depends on the end result desired. At times it is only necessary to remove three or four ribs. The wound is closed and a drain kept in for one day. The lung is collapsed at the time of the operation and the structures can be seen to fall in from the ribs as soon as they are freed. After six months the ribs regenerate from the periosteum that was left intact, and the result is a strong upper chest with very little deformity, and the upper part of the lung that was previously destroyed is crowded in and heals by a permanent collapse.

The complications of the thoracoplasty are few. Cardiac decompensation is the most common cause of death. Therefore, the case should be studied well before surgery. Pulmonary and cerebral embolism rarely occur. Paradoxical breathing should be watched for and prevented when the lung is seen to move back and forth as the ribs are freed.

Extra pleural apicolysis consists of packing body tissues or a foreign substance such as paraffin between the ribs and the parietal pleura to produce a localized collapse of the lung over the cavity. This is sometimes a very effective procedure in cases that are not suitable for the other collapse measures; however, it is rarely used, since the wounds become secondarily infected and are discouraging to treat.

The one thing that I wish to emphasize is that the procedures described in this paper do not substitute for bed rest. Although the length of time the patient is required to be on bed rest is greatly reduced, he must be kept under constant supervision and modified cure for at least one year. The pneumothorax cases should be kept in bed at least two months after the initial treatment and kept on a modified cure for one year. Thoracoplasty cases should be kept in bed for at least four to six months and kept on a modified cure for at least a year to eighteen months. It is well to remember that surgical procedures in tuberculosis are not cures, but are only incidents in the course of the treatment of the disease. Healing really begins at the time of collapse, and the lesions are not healed sufficiently to stand much strain for at least one year, regardless of how well the patient has done clinically.

SUMMARY

1. The diagnosis of pulmonary tuberculosis should always be verified by the use of the x-ray, since it is needed in every case to map out a program of treatment anyway.

2. Bed rest should not be depended on altogether to heal pulmonary tuberculosis in a majority of cases. Collapse therapy should be instituted whenever possible as soon as the patient shows inability to control the disease with bed rest alone.

3. Artificial pneumothorax, both unilateral and bilateral, is the procedure of choice and should be continued for twelve to fifteen months for infiltration without cavitation and two and one-half years, and better, four years, in cavity cases.

4. Phrenic neurectomy has been too widely used. Other than in lower lobe lesions and in cases of interfering diaphragmatic adhesions temporary diaphragmatic paralysis should be tried to determine the effect before an irrevocable phrenic paralysis.

5. Thoracoplasty, both partial and complete, are considered safe and effective procedures today. It is to be used only on patients in relatively good condition and only when pneumothorax and phrenic nerve paralysis have failed. The conditions present in the chest determine the type of thoracoplasty to be performed.

6. Intrapleural apicolysis is very effective in some cases that are unable to have other collapse measures, but due to wound infections is not used often.

7. Collapse measures do not substitute for bed rest although the time of bed rest is shortened. Healing begins at the time of collapse. A tuberculous lesion cannot be considered healed for at least one year after all symptoms have disappeared.

720 Hume Mansur Bldg.

DISCUSSION

JOHN H. REED, M. D. (Logansport): I would like to ask the essayists a question about a patient of mine, a man, who has just returned to my office from a sanitarium. Five months ago he went to the sanitarium with a temperature of 99 degrees in the morning and 100 degrees in the evening. The von Pirquet test showed tuberculosis, and the x-ray the same thing—cloudy spots in the lungs. There were no tubercle bacilli in the sputum. His wife and two children are tubercular, and a sister-in-law died of hemorrhages a year ago. He has lived with all these people. He was in a sanitarium in this state for five months and came home recently, stating to me that they had sent him home as nearly cured as was possible. I examined him and his temperature was the same as formerly, and he said he had carried that temperature all the time he was in the sanitarium. He has gained twenty-five pounds in weight and looks much better, but he has a cough and the same roughness in the throat that he had before.

I cannot understand why they do not know when tuberculosis is cured. The statistics show that we have had much more of this disease since the war, and we have no control of it. Why is that? To me, it simply shows that one thing is increasing the incidence of tuberculosis, and that is the depression. Many people do not have the money to safeguard themselves, and this has caused the spread of tuberculosis. I would like to hear something more on this subject.

RUSSELL S. HENRY, M. D.: From the doctor's description of his case I am wondering whether that patient has active tuberculosis. The fact that he is running as high a temperature in the morning as he is in the evening is rather against tuberculosis, although we do sometimes find it. We see quite a number of sinus infections associated with non-specific lung infections, resulting in a broncho-sinusitis. A broncho-sinusitis causes the patient to cough, which aggravates the irritation of the trachea, which in turn incites cough. We, therefore, find a chronic cough in such minor non-specific infections. The fact that this patient had a positive tuberculin reaction does not mean that he has active pulmonary tuberculosis. Even a 4-plus tuberculin reaction only means that this patient has been in contact with tuberculosis some time in his lifetime. We find quite a number of cases that are sent into tuberculosis sanatoria that stimulate tuberculosis, and which turn out to be one of the many low-grade infections which will run a low-grade temperature and give the symptoms mentioned before.

J. A. PARRAMORE, M. D. (Crown Point): I quite agree with Dr. Henry that it is very difficult to know when to discharge a patient. I do not think any of us know. It is also very difficult to know when tuberculosis is active and when it is inactive. I do think that in a considerable number of cases, from observation and the tests we can make at the hospitals, we can and do make certain that the tuberculosis is active. But all that any of us can do is to put the patient in the sanitarium, and after the tests are made and treatment with diet and rest and graduated exercise is given him over a rather extended period of time, determine what the reactions are.

E. M. AMOS, M. D. (Indianapolis): I cannot agree with the statement concerning the increase of tuberculosis since the war. Twenty-five years ago 204 people died from tuberculosis to 100,000 population. That has been decreased. Following the war it was down to something near 150 deaths from tuberculosis to 100,000 population, and last year it had decreased to the point where there were only 57 deaths to 100,000 population from pulmonary tuberculosis. Tuberculosis, although a very serious disease, does not take the toll it did before the war, and before the organization of the American Tuberculosis Association, twenty-five or thirty years ago.

I also disagree with the statement that we cannot always tell whether tuberculosis is active or inactive. I think the majority of the best authorities will hold that it can be definitely known when tuberculosis is active. We have many findings from physical tests, but if the x-ray shows shadows and we have a positive sputum, even though we do not have increased pulse rate nor temperature, the tuberculosis is active, but the patient will get along fairly well. If we make the physical tests where there are localizing symptoms, pulse, temperature, examine the sputum, and then take x-rays to determine the shadows, it is a check; but do not depend on the x-ray alone. I have seen an x-ray picture of one man who had, because of pus formation, a carcinoma of the lungs, and the x-ray showed a positive pleural effusion. I do not discredit the picture, but the physical tests are the determining feature. I commend the x-ray as a wonderful help in checking the ultimate diagnosis of tuberculosis, but I do not depend on it alone. Its real value and significance is that it may corroborate a diagnosis from physical tests. It is from the clinical findings that we get the true clinical picture.

DECENTRALIZATION IN MEDICINE

BEAUMONT S. CORNELL, M. D.
FORT WAYNE

The time-honored patient-physician relationship, so complete as to control the economic and professional phases of practice, has been disturbed especially in the past twenty years by new methods of practice devised by doctors, and by new economic plans of practice usually projected upon the profession by non-medical groups. Both types of change indicate the encroachment of industrial, mass-production philosophy into a service whose success is bound up closely with the personal attributes of the individual physician. The former development began with the specialist movement, and the latter was inspired chiefly by the hope of middleman profit.

Specialism, expanding beyond its primary forms in surgery to include internists, pediatrists, gynecologists, obstetricians, genito-urinary surgeons, orthopedic and neurological surgeons, roentgenologists, psychiatrists and others, owed its development to the mass of accummulated information which obviously made the "universal mind" in medicine an impossible ideal. The habit of referring work to a specialist reached its zenith in the early 20's and declined in the same decade owing to the better professional training of the newer graduates. Following the downward curve of general business after 1929, specialism suffered an expected loss of employment, owing to stringency among the classes served. Presumably, specialism will resume its onward development with the return of much-delayed prosperity. But a great, and often unrecognized, decentralization has taken place

in the interim. Thousands of general practitioners have installed their own clinical laboratories and x-ray equipment partly as a natural defense program against the inroads of specialism. That particular phase of specialism which by delegation of its work to lay persons suggested the intrusion of industrial methods, has been partly absorbed already by the general practitioner.

The specialist's services have been available in the past almost exclusively to the luxury class, or to the poorer classes only through philanthropic or other organized channels. The virtual disappearance of the luxury class during the past five years has brought the specialist so near to bankruptcy that broad fee reductions alone saved the day. Any socialistic or government scheme of practice might make or break specialism, depending upon the nature of the scheme. There is estimated to be ten per cent of cases of illness where the specialist's services are essential, and, for this fraction, the need for their services will always exist as in the past.

The grouping of specialists was the next development toward centralization of service. The study by specialists, in cases where more than one had to be consulted, caused unpleasant inconvenience and time loss to the patient. For this reason, the clinic group enjoyed a deserved popularity and justified its creation as a concept of service. However, the very serious internal problems of expense and professional harmony, and no less the difficulty of "handling" the non-organized portion of the profession, have demonstrated at length that eighty per cent of all clinics have failed financially. Only the most astute of physicians can hope successfully to offer to the public this most modern type of centralized service at a profit, or, indeed, without great loss. Successfully conducted, clinics confer an excellent service to difficult cases, and sometimes become medical institutions with beneficial influences on medicine in general. The surgeon must be the central figure for he is one of the two people in medicine glorified by the public. The mass production methods, of necessity employed in clinics, with sub-employment of non-medical help for technical procedures, is the most outspoken example of the adoption of industrial methods in medicine, and clinics are popular in spite of, and not because of, this tendency.

Much decentralization has taken place in this field as well. During the present adverse business cycle the depreciation in gross income for American general practitioners has been forty per cent. While statistics for clinic groups are not available, the depreciation probably greatly exceeds that figure. Several large clinics have accepted bankruptcy and are operating in receivership at this time.

Specialism and clinic service flourish only with a luxury class. It is conceivable that if general business, upon which medicine depends for its service payments, were to sink to a permanently low level, specialism and clinic practice would be unrecognizably altered. The great decentralizing factor in medicine today is the state of general business, because centralization costs money.

People insist upon advanced types of medical service, but balk at the price. It would ill behoove anyone to criticise the public for this attitude, as it is, after all, the nature of the people universally to insist on what they want and at their own terms. If it were not so, the race would never have advanced. Therefore, if the profession cannot give the public the service it demands, the public will try to force us to do so, and on its own terms. It is altogether probable that such an effort at coercion will be a masterpiece of blunders, but then, are we really doing all that we can to assist them to an intelligent viewpoint?

The essential fallacy of most of the modern attempts from without to pour us into a new economic mould arises from several sources. There is the lesson of life insurance and other types of fraternal and mutual protection which, so far as we can judge, have been successful in their services to the public. The burden of illness, which is as much our inheritance as death, does not inspire the same willingness to budget against it. Would health insurance solve this problem as it has solved the financial problem of death and estates? Government medicine, even in small doses, is, from the politician's angle, one of the finest medicines. The temptations for paternalistic administrations must be obvious. Then we have the clever, industrial magnate who, having succeeded in his own field, tries to be helpful by suggesting industrial and mass production methods for our profession. Being "survey minded," the public forms a group to find out how much is spent on medical care, and when they finish they find that the physician's part of the expense is the least of all.

Why not form a committee on the cost of public entertainment? Perhaps they shall, for we are still "crisis-minded" and many idle women could obtain a mighty thrill of horror from any list of figures if it were a big enough list.

The disturbance of the patient-physician relationship resulting from the specialist and clinic movements was slight as compared with movements not intrinsic to the profession itself but promulgated, with varying degrees of success, by non-medical individuals and groups. It is this "manager" type of movement which must arouse the physician's genuine concern, and inspire suitably strong adverse reactions if we are to avoid greater, unknown, and presumably undesirable changes in the broad sociological status of the profession.

All types of insurance medicine are built on the hope of profit. In such a national plan as the National Insurance Act in England, profit may be interpreted as cost reduction for the clubs which previously footed the bills. It has become possible for us to live with industrial insurance and yet profit is the basis of the plan. In the scores of

contract schemes which have evolved, middleman profit is the inspiration.

The Veterans' Act of 1924 started real government medicine in America, and it was the child of an administration not particularly paternalistic. Strangely enough, its more serious corrollary of extending service to relatives of veterans was squelched by an administration thought by many to be truly paternalistic.

Hospital expansion in the past twenty years, coupled with nurses' training schools, built up an extensive and fabulously costly national equipment for assisting physicians in the treatment of the sick. This arm of the service was the first to become paralyzed by the advent of the financial depression. The control of most large hospitals unfortunately had passed into the hands of non-medical groups, and all without exception were forced to employ non-medical help and adopt the practices of the industrial world. Most hospitals soon went into the red figures and the business managers (superintendents) found it difficult, on the one hand, to resist the insurance schemes proposed to them by promoters, and on the other, to convince or appease the medical staff.

Taking into consideration the many insurance, industrial, contract, government, fraternal and other forms of medicine at present in operation in America and other countries, it becomes evident that, although the surface has been merely scratched, the movement is well under way and promises to increase its activity year by year. Unfortunately the physician receives the least consideration of the three entities comprising the triangle of patient, business man, and physician. With a very few exceptions, the medical fee is always dictated by the company. Salaries are offered in government schemes. Under the National Insurance Act in England a capitation method of payment is adopted, so that the panel doctor's income depends on the number of persons on his panel list. The selling point of insurance schemes to doctors is the ease of collections, but almost always the fee is limited by agreement. When this is not the case, there are reasons to suspect actuarial preparation of an inexpert type. In spite of the fact that the physician is the *sine qua non* of all such plans, he often capitulates because of personal financial need. It is an open question as to the attitude of the newer medical graduates, many of whom have been exposed during their college courses to much socialistic, and, allegedly, to much communistic, doctrine. On the whole they seem to be in line with established methods of practice.

There is a combative, and also a constructive, course open to us to stem the tide of advancing centralization in medical service. The former is the use of political pressure. It costs only three cents to write to the senator or representative in congress. It takes only a few minutes to talk to patients and show them the fallacies of centralized medicine. The constructive course is the more important but requires not minutes but years for accomplishment.

A profession thoroughly educated in medical economics will be able to tolerate a mass of positive and intelligent opinion to replace the present comparative indifference, and to assume the initiative (not accept the minor role) in all changes which they themselves consider to be necessary from time to time. In this greater and slower effort the American Medical Association is doing most excellent work through its Department of Medical Economics under Dr. Leland.

There is a vast inertia of safety for the profession in the near future, built on custom and the desire for personal service from the physician himself. Let it be realized in the clearest manner that the back-bone of the medical profession is the general practitioner. Centuries of faithful service, often ill-paid, but unstintingly given, happy only in the sense of a task well done, frequently a pathetic figure from the economic standpoint, the general practitioner has conferred the greatest benefit upon the profession as a whole, and has created one of the few apotheosized figures in the popular imagination—the family doctor. The psychologic influence of this figure is the most stable factor in medical economics today, and, in the face of portentous changes, it is our main anchor.

ABSTRACTS

DIABETIC CATARACT: INCIDENCE AND MORPHOLOGY IN ONE HUNDRED AND TWENTY-SIX YOUNG DIABETIC PATIENTS

C. S. O'BRIEN, J. M. MOLSBERRY and J. H. ALLEN, Iowa City (*Journal A. M. A.*, Sept. 22, 1934), studied the crystalline lenses in young diabetic subjects in order to determine the incidence and morphology of cataracts in such patients. The report is founded on repeated detailed examinations of the lenses in 126 diabetic patients up to and including the age of 33 years. Most of the patients, when first seen, had been on treatment for some time. Practically every lens in the entire series showed occasional small punctate congenital opacities and there were a few in which coronary cataract was present; the diagnosis in such cases was usually not difficult, but in those lenses in which doubt existed the changes were classified as congenital. The incidence of cataract was 16 percent. The morphology of these cataracts differed, but two common types of lens changes were encountered: 1. Snowflake or snowstorm cataract. This type was found in 60 percent of cases and appeared as innumerable small grayish white flaky opacities in the anterior and posterior cortical areas. In a routine study of several hundred cataracts it was seen, with one exception, only in persons with diabetes. 2. Posterior subcapsular cataract. This type was found in 70 percent of cases as a saucer-like posterior subcapsular opacity composed of confluent gray granules and oftentimes iridescent crystals. It is not peculiar to diabetic cataract, since similar changes may follow ocular injury or disease, and it has been noted in senile cataract.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

Office of Publication: 1021 Hume Mansur Bldg., Indianapolis.
Editor: E. M. SHANKLIN, M. D., 5141 Hohman Avenue, Hammond, Ind.

Managing Editor: THOMAS A. HENDRICKS, 1021 Hume Mansur Building, Indianapolis

Editorial Board:
F. T. ROMBERGER, M. D., Lafayette.
T. B. RICE, M. D., Indianapolis.
PIERCE MACKENZIE, M. D., Evansville.
L. P. HARSHMAN, M. D., Fort Wayne.
ERNEST RUPEL, M. D., Indianapolis.

JANUARY, 1935

EDITORIALS

THE ETIOLOGY OF PEPTIC ULCER

Typical peptic ulcers occur only in those parts of the gastro-intestinal tract bathed by gastric juice. There can be little argument against the contention that the most important factor in the actual production of ulcer is the corrosive action of the gastric juice.

The philosophy of all methods of treatment of peptic ulcer, except excision, is ultimately the riddance of the action of the gastric juice by neutralizing the acid, by making an additional opening in the stomach to aid it in more rapid emptying, or by starvation which permits no stimulation of gastric secretion.

The mechanism by which the wall of the stomach normally keeps itself immune to the digestive action of its own juice has not been satisfactorily explained, and the pathological condition which causes the stomach or duodenum to lose this natural immunity, with resultant ulcer production, has been explained in many ways. These include the effect of circulating emboli or toxins on the local blood supply, or local disease of an artery; the specific effect of certain streptococci as demonstrated notably by Rosenow; and the neurogenic theory of constitutional imbalance of the vegetative nervous system which, by local blood vessel spasm in the stomach or duodenum, may cause necrosis and allow digestion of the mucosa. No doubt many factors predispose to peptic ulcer formation, perhaps including an hereditary predisposition and abnormal modes of living and eating.

Recently an article in the English *Lancet* offers another explanation of the predisposing condition for ulcer in the stomach. It has been shown by Dr. Harvey Cushing that stimulation of the brain can cause ulcers to form in the stomach. The English investigators[1] made an extract of the posterior lobe of the pituitary by the acetone-picric acid process such as is used in the preparation of insulin from the pancreas. This was injected into rabbits and it was consistently found that, other than a very slight toxic effect upon the liver and kidneys, no organ or organs were affected but the stomach. The whole acid producing area of the stomach was found to be necrotic and a hemorrhagic mass. Preparations of other glands and tissues were made by the same process, but when injected into the animals no such effect was produced. Commercial preparations of the posterior pituitary were injected in a like manner. The oxytocic principle was not at all effective, but the pressor factor produced a definite change in the stomach of varying intensity. A mixture of both produced only slight changes.

No conclusions were drawn. The investigators are not sure that it is a new posterior lobe extract or only a more potent extract related to the pressor principle. Its mode of action on the stomach cannot be stated. It must either produce a direct toxic effect on the acid-secreting area of the stomach or stimulate the secretion of hydrochloric acid to a damaging degree. It would seem more reasonable to suppose that it interferes in some way with the natural protective mechanism of the stomach mucosa.

These investigators are continuing their work to find, if possible, the chemical nature and the mode of action of this very interesting preparation.

INDIANA MEDICINE MOURNS

Stark, staring tragedy struck Indiana medicine a most cruel blow when the relentless hand of fate struck down two of our most beloved members, Dr. John W. Carmack and Dr. Arthur M. Mendenhall, both of Indianapolis, who were killed in an airplane accident while enroute from Detroit where they had gone to address the Wayne County Medical Society. Dr. Mendenhall's daughter, Miss Evelyn Mendenhall, who had accompanied the physicians on the flight, also was numbered among the victims of the terrible disaster.

The passing of these two men, both in the prime of life, and both having reached all but the peak of professional attainment, leaves a void in our ranks that cannot well be filled. Dr. Mendenhall was a recognized leader in the field of obstetrics, and until recently was the head of the department in the Indiana University School of Medicine. Dr. Carmack was a nationally known figure in the field of otolaryngology, and at the Cleveland session of the American Medical Association he was honored in being chosen secretary of the Section

[1] Dodds, E. C.; Noble, R. L.; Smith, E. R.: *A Gastric Lesion Produced by an Extract of Pituitary Gland.* Lancet. Oct 27, 1934. No. 5800, Vol. CCXXVII.

on Laryngology, Otology and Rhinology of the national association. In his work as associate professor of otolaryngology in the Indiana University School of Medicine, he was generally recognized as a teacher of unusual distinction, beloved by his students and fellow members of the faculty. Dr. Carmack was a frequent contributor to medical literature, and his writings attracted more than ordinary attention in the medical world.

Dr. Carmack served as general chairman of arrangements for the recent Indianapolis session of the Indiana State Medical Association, and his untiring efforts on that occasion had much to do with the fact that it was the most successful meeting in the history of the Association. John Carmack was of the dynamic type, putting every ounce of energy into any project in which he became interested; he was a man of marked ability, and his achievements were legion.

The Indiana medical profession has suffered an irreparable loss. THE JOURNAL staff has had occasion, innumerable times, to know of the kindliness and helpfulness of these two physicians who unfailingly held aloft the torch of idealism in medical practice. These men will be grievously missed for many years to come; their memories will be sacredly cherished.

1935 AND LEGISLATION

With the coming of the new year we will have with us the biennial session of the Indiana legislature. In normal times this announcement creates little more than passing interest among physicians. This year, however, thinking and observing members of the medical profession of Indiana view with wondering eyes the sitting of this body. Just what it portends for our profession is, of course, a more or less open question; if we may judge by the signs of the times, it is more or less certain that several bills will be introduced in which we are all vitally interested.

It is commonly bruited about that most states will witness the introduction of legislation whose purpose will be to introduce some phase of socialized medicine; whether this will take the form of sickness insurance or an overt attempt to regiment the medical profession cannot be foretold; in any event, the thing will probably be before us in one form or another and it behooves us to meet the attack with a grimness of purpose that cannot be resisted.

We have refused to become panicky over the prospect before us, yet at the same time we have dispassionately and more or less calmly considered its various possibilities. For the very life of us, we cannot conceive a Hoosier legislature enacting a measure that would take from the greatest of all the professions the inalienable right that has been ours from the beginning, that of a frank individualism. With this feeling inbound within us, we must face facts and, we are told, facts are stubborn things. Among these facts there is one outstanding, that a mighty effort is being made to bring about vast changes in the economic and social status of the American people; that the medical profession is by no means not a part of the picture.

We have a quite definite notion that thousands of those who have been recipients of relief of various sorts have come to like the idea; they have been assured of food, clothing, and shelter for so long a period that they have come to expect it as a matter of course. Now that they have become accustomed to this sort of thing, they are ready to demand more. An analysis of the vote at the recent election will serve to give color to this belief. Only a few days ago did a patient who had recently heard a discussion of socialized medicine, by the head of an Indiana college, carry on for several minutes with a dissertation on the benefits to be derived from such a scheme.

On the other hand, we have had frequent occasion informally to discuss the matter with business men and manufacturers, all of whom term the plan utterly chimerical and declare they will have none of it.

One bright spot on the horizon is the result of the gubernatorial election in California, where the EPIC plan of Sinclair was cast aside by an enormous majority; this leads us to believe that the electorate at least is not ready for an attempt at this form of socialism. However, do not overlook the fact that this was a vote of the entire population of that state, while legislative enactments are the work of a group of but 150!

This brings us to the subject we wish to discuss, that of being on the alert during the coming session of the Indiana legislature. While it is true that the State Association has been fortunate in having a legislative committee on the spot for years past, we should not solely rely on this little group; each member of the Association has a distinct duty in these matters; each member has some influence, even though it be in a secondary way, with some member of the legislature. Contact with these members should be maintained throughout the session, even though there is nothing of particular import pending at any given time; let them know that we are interested and on the alert, that we are cognizant of what is going on in the capitol.

Indiana can be kept free from these pernicious influences; there is no one but ourselves to see that this is accomplished.

INDIANA'S DAFOE

Dr. Walter J. Leach, our incoming president, needs no introduction to Hoosier medicine, but our long association with him, covering a period of more than a quarter of a century, impels us to say a bit about this unusual type of professional individual. Recently we read an editorial in the Indianapolis *News* entitled "Country Doctor on

Broadway," which read as though it might have specifically referred to Dr. Leach. The editorial was one of a number of press references to the recent visit of Dr. A. R. Dafoe (of Dionne quintuplet fame) to New York and Washington. One little sentence in this editorial struck our fancy. "Dr. Dafoe may be something of a temporary curiosity to the crowds, but he is a rare treasure to the professional world." With little alteration this sentence might be applied to Dr. Walter Leach, for while there is nothing of a curiosity about the man he most certainly is a "rare treasure" to Indiana medicine. The thing we most admire about the man is his rugged individualism, his steadfastness of purpose, his high ideals, and, withal, the very "commonness" of the man.

As the year goes along and the rank and file of the Indiana profession has opportunity to become better acquainted with our new ranking officer, we believe that our personal opinion of the man will be generally accepted.

EDITORIAL NOTES

WE WISH all Our Folks a very happy and prosperous New Year, a New Year that will wipe out the memories of the "lean" years just gone by; a New Year when we really can begin anew to build up, and again take our accustomed place in the social order without thought of yesteryear!

THE preliminary program for the joint meeting of the Council on Medical Education and Hospitals and the Federation of State Medical Boards has been announced. The meeting will be held at the Palmer House, Chicago, early in February.

THE *Survey-Graphic* for December, 1934, is a special number devoted to "Buying Health" and should be studied carefully by every physician interested in the subject. Further consideration will be given to this number of the *Survey-Graphic* in a future issue of THE JOURNAL.

WE ARE officially advised that in the very near future the State Board of Medical Registration and Examination will have some definite information for us in the much-discussed matter of professional anesthetists. Many of our larger hospitals have shown a very decided interest in the matter, and some already have taken steps to comply with the ruling of the Board in this regard.

AN INTERESTING and brief talk on "How Doctors Help Industry" was given by Mr. W. J. Cameron on the Ford Sunday Evening Hour, November eighteenth. He started by asking his listeners to consider the years that are added to our working life by eyeglasses. He finished by saying that the Ford Company believes in health—in the factory and out, and his in-between statements indicate the feeling that the regular M. D. is the only one capable of guarding the workman's health.

HAVE you read an interesting medical article that you believe would be beneficial to other members of the Indiana State Medical Association? If so, your editor would appreciate receiving an abstract of the article. Abstracts must be limited to 350 words, and must contain the name of the author, complete title of the paper, complete name of magazine in which published, and date of publication. Members of the Indiana State Medical Association are invited to contribute abstracts of articles which have appealed to them.

WE FEAR many opportunities to bring the matter of sickness insurance to the attention of the lay public are being overlooked; a recent experience demonstrated that the average thinking citizen is mightily interested in the proposal. After a brief, informal discussion of the subject before a luncheon club, the speaker was amazed at the number of men who voluntarily expressed themselves as being highly interested in our side of the subject. Don't overlook any such opportunities, but be sure you are prepared to discuss the matter intelligently before you accept an invitation to address any lay organization.

WE ARE advised that some of our hospitals are a bit dilatory about making provisions for anesthetists; it should be remembered that the State Board of Medical Registration and Examination has ruled, and the ruling has been upheld, that anesthetics must be administered by licensed physicians. Some time ago we were officially advised that the board intended to enforce this regulation early in 1935, hence it would be well for hospitals which have not already done so to prepare for the change. We would again suggest that this program affords opportunity for several of our members to take up a specialty that will ultimately afford a good income.

The Carroll County Medical Society is the first to report a 100% paid-up membership for 1935! Dr. E. H. Brubaker of Flora is the secretary.

Dr. W. F. Carver also reports Noble County 100% paid up for 1935.

A SHORT time ago we published an editorial note commenting on the scheme devised to entice a few dollars from gullible physicians, that of publishing a Who's Who list of doctors available for life insurance examination appointments. Evidently some of our members do not read the editorial notes for we have had two inquiries from physicians who have been approached with this form of solicitation. It is our endeavor to be ever on the alert and to tell "our folks" about such rackets. A few moments spent in reading THE JOURNAL comments might save a few dollars.

WITH the coming of the new year there is the omnipresent spectre of payment of dues confronting your county society secretary. In the larger societies this becomes a task, this thing of having payment of dues strung out over a period of a full year. Paraphrasing a Pillsbury ad—"Eventually (you mean to pay your dues), why not NOW?" The sinews of war will be needed this good year of 1935 as never before; prompt payment will not only make you feel better but will hearten your officers, both local and at headquarters, no end. Cheer up your secretary by remitting the annual payment *right now.*

A NOTE on the secretary's message to members of the Fort Wayne Medical Society is interesting and timely. At a recent meeting of the society, a paper dealing with the mortality factors in acute appendicitis was presented by an out-of-town speaker. One doctor had driven forty miles to hear the paper, and after the meeting he remarked to the secretary that the small attendance at the meeting was another factor in the mortality rate! The secretary in his message then called attention to the fact that the money of the members is being spent to bring the newest medical thoughts, presented by able men, to members of the society, and it is distinctly up to the members to see that they get their money's worth.

THE Indiana State Board of Medical Registration and Examination recently has completed a stupendous task in checking the files of physicians licensed to practice in Indiana. The task was arduous but not always without humor. For instance, an inquiry sent to an osteopath, requesting information as to credentials, etc., brought the following reply:

"I wish the 'ell I had an Indiana license, if you are giving any away send me one. My parents live at ....., Indiana, and no one has been interested enough in me to know that I left there sixteen years ago. The only practicing I ever did in Indiana was to doctor a sick pig, it died, and the autopsy revealed it died of worms."

SOME ONE in Minnesota conceived a very good idea, that of preparing an authoritative discussion of diabetes for lay consumption, and then saw to it that it was put into execution. The booklet, couched in language readily understandable, was prepared by a special committee of the Minnesota State Medical Society, and is circulated among lay persons under the direction of the members of that organization. It tells the diabetic just what is expected of him, in the event that he places himself under treatment; it gives excellent advice as to diet, and even outlines menus for patients in the various stages of the disease. As we have said, it is thoroughly readable and understandable, and it seems to be designed to make the life of the average diabetic much more comfortable, especially from a mental standpoint. We congratulate Minnesota medicine on this forward step.

A "SICKNESS INSURANCE CATECHISM" has been published by the American Medical Association, through its Bureau of Medical Economics. Every physician should have a copy. In the article, sickness insurance is defined; its effect upon medical service is outlined; its cost; its effect on the medical profession; its advocates; its connection with politics; the position of the organized medical profession in regard to sickness insurance—all of these and many other questions concerning sickness insurance are discussed. Certainly it is worth the time of any practicing physician to read this brochure thoroughly. Your county society secretary has a supply of them, or a copy may be obtained from the Association headquarters office, 1021 Hume Mansur Building, Indianapolis, or the Bureau of Medical Economics, American Medical Association, 535 North Dearborn Street, Chicago.

MOST Indiana physicians receive or have access to one or more of the Indianapolis daily newspapers. If you do not have such contact it would be well to establish one right now, for the biennial session of the Indiana legislature is upon us and never before has it been so important that the medical profession keep eyes and ears open, lest some measure inimical to the profession get started on its way through that body. You know your representatives and your senators. If you discover a bill not to your liking write to them at once. Don't depend entirely upon your county society legislative committee; they need your help and you can aid by getting into contact with your legislators. Most of these legislative folks are at

home for week-ends; a little personal conference with them is often more efficacious than a letter. No matter what method is used, get in touch with your legislators the minute you learn of any legislation unfavorable to the profession.

THE Indianapolis Better Business Bureau *Bulletin* for November, 1934, is devoted to an exposé of "bootleg insurance" schemes which have flooded Indiana within the past few years. Forty-three so-called associations have been incorporated in Indiana within recent years, selling protection in the guise of memberships. More than a hundred such schemes have been offered to Indiana people by mail and by unlicensed agents. Our present insurance and corporation laws are inadequate and it is hoped that the next legislature will give this matter proper attention. The list published by the Indianapolis Better Business Bureau includes several health insurance schemes which have been investigated by our Association. Information concerning any proposed insurance scheme is available from headquarters office, and information that is lacking will be obtained for any member who makes inquiry.

FOR some time past we have maintained that leadership in medicine and surgery no longer belongs to certain of the European countries; we have felt that our advances in medical teaching during the past decade or so entitled the United States to that honor. Hence it is quite refreshing to find the following comment in the "Today's Science" column of David Dietz:

"The rise and progress of American medicine constitutes one of the brightest chapters of the nation's recent history. Only a generation ago, American eyes were turned across the sea. No medical man could call his education complete unless he had spent some time in study in Europe.

"Today, the pendulum is swinging the other way. European savants have their eyes on America. Students are beginning to cross the Atlantic from east to west as well as from west to east. American medical schools rank with the best in the world. American physicians and surgeons are as skillful as any in the world. American scientists are leading the way in many fields of medical research."

A RECENT issue of the Indianapolis *Times* carried an editorial entitled "Catch Cancer Early," which is worthy of reprinting in our columns:

"One of the most dangerous things about cancer is that people have been too thoroughly persuaded that it is utterly incurable. Feeling that way about it, and fearing the malady so greatly, many people fail to seek medical attention in time—and their fear of an incurable disease is translated into fact.

"Dr. Ira Kaplan, director of the New York City Cancer Institute, remarked recently that fully 40 per cent of the cancer cases now being cared for as hopeless would not be in that state if patients were educated to seek aid from the proper sources in time.

"In order to provide that education, New York health authorities designated the last month as 'Cancer Month.' Health authorities are convinced that if both public and doctors can be educated to recognize the first danger signals of cancer, and if the public can be safeguarded from quacks, the cancer death rate can be reduced."

THE New England *Journal of Medicine* for November 22, 1934, in commenting on "Medical Schools and State Boards," strikes back at some of the critics of the Massachusetts medical law. The editor says, "However, since Massachusetts is actually a laughing stock among the states, on account of some of the provisions or lack of provisions of its medical practice act, it may be interesting to consider the basis of the laughter by a comparison of the statutes of the various jurisdictions in the United States." He comments on the peculiar quirks of the medical laws of many states and declares that only four explicitly accept the standards of the Council on Education and Hospitals of the American Medical Association—Virginia, West Virginia, Kansas, and Hawaii. Indiana fares very well at the hands of the writer when he says, "Indiana is unique in empowering its Board to keep its requirements 'up to the average standard of medical education in the States.'" This is just another proof of our oft-repeated assertion that Indiana has every reason to feel proud of her basic medical law.

"THREE hundred new members in 1935!" That should be the mark aimed at by the Indiana State Medical Association. Every county medical society secretary should enlist in such a campaign, aligning with him the most interested members of his local group. There is no valid reason why this goal should not be reached, for, as a matter of fact, the goal is not high enough; we should campaign to enlist every eligible physician in Indiana. Of the arguments in favor of membership in one's local medical society there is no end; never in the history of medicine has it been so important that we make a united stand against the once insidious, now open attacks being made upon us. While we believe the danger is less acute than it was several months ago, we must do a complete job of scotching. This we can do, this we will do, if we can but have a united front. While the lowly county society secretary must bear the brunt of the cam-

paign, he must have the loyal support of his membership. This is where YOU come in. Look about you, and if one of your fellows knows not the joy of membership, entice, lure, or forcibly drag him in!

ACCORDING to the November Statistical Bulletin of the Metropolitan Life Insurance Company, the chance of celebrating a golden wedding anniversary depends upon one's age and the age of the consort at the time of the marriage. If marriage occurred when the bride was twenty-two and the bridegroom twenty-five (about average), the chance that they will survive to celebrate their golden wedding fifty years later is just about one in six. However, if the couple waits until the bride is thirty-seven and the bridegroom forty-two at the time of marriage, they have about one chance in a thousand of surviving until the fiftieth anniversary day of their wedding. We fear that the probability of a physician indulging in the revelry of a fiftieth wedding anniversary is pretty slim, for by the time he completes his medical education and becomes established sufficiently to afford a wife, he approaches the "one in a thousand" position on the scale. Oh, well, this is just another of the numerous instances that go to show that a man who wants to become a physician must place that ambition above everything else. Of course, some of us are lucky enough to find help-mates who cheerfully struggle with us through those lean years.

IN view of the recent interest shown by physicians requesting neo and sulph-arsphenamine from the Indiana Division of Public Health for the treatment of indigent infectious syphlitic patients, it would be appropriate to make a few more remarks about the activities of the Division of Public Health in efforts to control the prevalence of venereal diseases. Of particular significance is the physicians' increasing confidence in this service. This, of course, is additional evidence of cooperation between physicians of the State of Indiana and the Division of Public Health (formerly the Indiana State Board of Health). The Indiana Division of Public Health, State House Annex, Indianapolis, Indiana, is distributing a brochure on the treatment of gonorrhea and syphilis free of charge to physicians in the state. The principal objective of this brochure is to assist or improve the treatment service rendered to indigent venereal disease patients. As stated in the foreword of the brochure, they do not attempt to prescribe or outline a set of plans which physicians should follow or strictly adhere to, but the brochure does offer a plan of treatment which, if carried out, the treating physicians will know that they are giving the treatment advised by many writers of modern textbooks. We hope that physicians will avail themselves of this opportunity to procure this brochure. It was also published with the expectation that it would aid health officers in reducing the incidence of venereal diseases.

THE following editorial comment, written by Dr. John H. Hare and published in the Vanderburgh County Medical Society *Bulletin*, is timely and worth while. Read it:

"In this critical day many of the old institutions receive unjust condemnation. The earliest medical society in America, so far as we know, was organized in 1784 and was designed, in their words, 'to lay a foundation for that unanimity and friendship which is essential to the dignity and usefulness of the profession.' From that time until now, various medical societies have been organized for the same purpose, until nearly every county of every state has its own society. The cynical remarks that one may hear now are made without thought.

"The progress of medicine is constant. Only by continuous endeavor can the practitioner keep pace. Medical schools claim responsibility for their graduates for ten years only, and after that the results depend entirely on the individual. None of us are so keen or so smart that we can afford to neglect the use of any facility to improve the quality of our work. In the field of postgraduate education, the county medical society, with its frequent meetings and discussions, stands supreme. It is very well known but frequently forgotten that the man who prepares a paper receives far more benefit than the ones who only listen to its reading. The leaders of the profession did not attain their position by sitting in comfortable seats listening to someone lecture or read a prepared paper.

"Doctors constantly worry about and discuss the many problems of the profession with which they are confronted today. The best possible agency for the solution of them is the united and democratic county medical society. Every legitimate doctor of the community is eligible for membership and most of them do belong to their local society. Paying dues annually is not enough; too many of us consider our duty done when we do that. We owe a debt to the profession which can only be paid by our active participation in the work of the group.

"Pay your dues, attend the meetings, prepare papers, and take part in the discussions. Don't fall by the wayside—let's all go on together."

MUCH time, money, and effort is expended by the Federal Food and Drug Administration in protecting the public from the danger of poisons used in sprays to combat insect pests and diseases that attack fruits and vegetables. One form of food

protection involving public health was a recent campaign against chocolate confections filled with alcoholic liquors. The sale of such candy is a violation of the Food and Drugs Act, and this requirement was not repealed by the repeal of the Eighteenth Amendment. By the prosecution of manufacturers and distributors, and confiscation of the candies, the traffic in alcoholic candies (which was sold widely to school children) was almost immediately suppressed. The attention of the Federal Food and Drug Administration also has been turned to alcoholic products sold as medicinal whisky. Much of the whisky was not of United States pharmacopoeial standard; imitations were sold as genuine whisky; some products were clearly short in volume; and some were mislabeled as to alcoholic content. As a result of initial seizures, stocks were re-labeled and made to comply with the law. During the fiscal year ending June 30, 1934, 421 seizures of medicinal preparations bearing false and fraudulent therapeutic claims were made, and 232 consignments were made the basis of criminal prosecutions. Mr. W. G. Campbell, chief of the administration, says: "This does not mean, however, that grossly misrepresented proprietary remedies are no longer to be found on the market. In the absence of a Federal statute applying the same standards of honesty and fair dealing to advertising that now apply to label declarations, manufacturers and distributors of proprietary remedies have an easy method of evading the penalties of the statute by selling their products under truthful labels and continuing their extravagant claims through the medium of advertising." Mr. Campbell's report also describes surveillances of anesthetic ether, showing that only seven cans out of 1,308 individual containers examined were substandard. The recent craze on the part of the public for the new type of medicinal humbug, so-called mineral crystals which are essentially laxatives or cathartics, is mentioned in the report, and attention is called to the fact that while medicinal claims of the most extravagant character are made for the various crystals, the more adroit manufacturers are careful to restrict such claims to radio and other advertising where there is lack of jurisdiction under the Food and Drugs Act. Legislation is being sought to correct this deficiency in the law. The interest of the public in the purity of the food and drug supply is growing, and undoubtedly will result in a demand for effective legislation.

THE old-time barter days and their effect upon the country doctor are recalled in an editorial comment from The New Harmony *Times* for December 7, 1934. To some of our country physicians in Indiana, this comment may seem to apply in part to the present time. The editorial comment follows:

"A memory of barter days comes to mind when as a member of a country doctor's family in the seventies we saw most of the fees he earned come back in the shape of barter. Money was scarce back in the hills in those days, so scarce that when the merchant of the small town took in a dollar bill, he wrote the name of the spender on it for fear it might prove counterfeit. After a while the currency of that locality looked like a leaf from an autograph album. And as a consequence of the barter system that prevailed back in the hills, the old doctor's barn was filled to the ridge pole with hay, his crib burst with corn, and the woodshed was stacked high with good dry four foot wood. We remember our regret that we couldn't eat this provender for due to this system of paying the doctor's bill there was often no money in his pocket; no sugar or coffee in the house, no coal oil for the lamp, and the biscuits frequently showed splinters from the close scraping of the bottom of the flour barrel. And while the doctor's horse waxed fat and wheezed with the heaves due to excessive feeding, there were times when the family itself was underfed. Of course there was a brighter side to this. Sometimes a generous patient, joyed at the coming of a new arrival, paid his bill in full and then there was a reign of plenty. The salt bacon gave place to ham, the empty sugar bowl was filled to the top with the brown New Orleans sugar of the day, from the molasses cruet poured the white corn syrup, sweet but tasteless, and the coffee mill ground cheerily in the kitchen. Life in the country doctor's family of those days was as one expressed it, a streak of lean and a streak of fat. As we see the prosperous, well groomed physician of today ride past in his fast, highly polished car, fee certain in the end, we wonder if he knew of the life his predecessor of the old days led. Long cold rides astride his horse over muddy roads, his sole supply of drugs carried in the pill-bags slung across his saddle, his work done in the dimly lighted room of the home instead of the modern surgical palaces of today; without the aid of the sanitation or antiseptics or any of the devices that make easy the saving of life or limb. Probably not. To the physician of today a pill-bag is a curiosity to be preserved in a medical museum, its long slim bottles filled with powders that yielded to the tap of the doctor's finger as he carefully measured out the doses on squares cut from an old newspaper. And yet the men who did this brought into the world and maintained the health of the men and women who were to make America the greatest empire on the face of the earth."

ERRATUM: On page 559 of the December issue of THE JOURNAL, footnote numbered 11 refers to E. S. Jones of Hammond, Indiana, instead of "Jones of Pennsylvania," as stated in the text. The author stated "Jones of this state," which was erroneously changed as noted.

SECRETARIES' ANNUAL CONFERENCE

Indianapolis Athletic Club, Green Room, 350 North Meridian Street, Indianapolis, Indiana
SUNDAY, JANUARY 27, 1935

1:15 p. m. Registration, Green Room, fourth floor, Indianapolis Athletic Club, Indianapolis.

1:45 p. m. Call to order and opening remarks by A. M. Mitchell, M. D., Terre Haute, chairman.

President, Walter J. Leach, M. D., New Albany.

President-elect, R. L. Sensenich, M. D., South Bend.

to 2:25 p. m. "The Wayne County Medical Society, Detroit, Demonstration," WILLIAM J. BURNS, Executive Secretary, Wayne County (Michigan) Medical Society, Detroit.

2:25 to 2:35 p. m. Discussion.

2:35 to 2:45 p. m. "Care of the Indigent Sick," Claude B. Paynter, M. D., Salem.

2:45 to 2:55 p. m. "Programs for the Average Sized Medical Society," E. H. Brubaker, M. D., Flora.

2:55 to 3:05 p. m. Discussion.

3:05 to 3:30 p. m. "Essentials of Medical Progress," OLIVER J. FAY, M. D., chairman, Board of Trustees, Iowa State Medical Society, Des Moines, Iowa.

3:30 to 3:40 p. m. "The Relationship of the Medical Society to Social Workers and Nurses," O. M. Graves, M. D., Princeton.



Walter L. Bierring, M. D.
Des Moines, Iowa



Mr. Albert G. Milbank,
New York



Oliver J. Fay, M. D.,
Des Moines, Iowa

3:40 to 3:50 p. m. "Cooperation of Doctors and Dentists in County Society Organization Work," Joseph L. Allen, M. D., Greenfield.

3:50 to 4:15 p. m. "Plans for Economic Security," WALTER L. BIERRING, M. D., president, American Medical Association, Des Moines, Iowa.

4:15 to 4:30 p. m. Discussion.

4:30 to 4:40 p. m. "THE JOURNAL and the County Medical Society," E. M. Shanklin, M. D., editor of THE JOURNAL.

4:40 to 4:50 p. m. "Public Health Educational Work by the County Medical Society," S. T. Miller, M. D., Elkhart.

4:50 to 4:55 p. m. Comments on Indiana Division of Public Health Set-Up, Willis D. Gatch, M. D., dean, Indiana University School of Medicine, Indianapolis.

4:55 to 5:05 p. m. Legislative matters. Election of chairman for 1935.

5:45 p. m. Dinner in Ball Room, fourth floor, Indianapolis Athletic Club.
"The Relationship of the Milbank Memorial Fund to the Medical Profession and the Field of Health," ALBERT G. MILBANK, chairman of the Board of Directors of the Milbank Memorial Fund, New York City.

SECRETARIES, OFFICERS, MEMBERS: YOU ARE INVITED TO ATTEND THIS MEETING

THE PRESIDENT'S PAGE

When we fully comprehend and thoroughly consider the great and many difficulties which the Indiana State Medical Association has encountered during the past three years, we will then more fully appreciate the efforts put forth and the success attained by our official body, along with the various committees, in their aggressive and determined conquest to keep the old ship on an even keel. If the membership as a whole had an intimate knowledge of the innumerable problems and difficulties encountered by the Executive Committee and the Council throughout the year, there certainly would be more coherent support and more potential efforts put forth by the county societies. Some county societies do exceedingly well, but a few of them do very little.

Now, whatever I do or say, I want each of you to know and to remember that I am not scolding or complaining, but I am sincerely pleading for a change in this inertia which exists in a few county societies. To remedy an evil, we must first be familiar with the cause of that evil. Some counties have very few doctors, and those few are widely separated; that in itself makes it difficult to function effectively as a unit. In such a case, I would repeat the familiar advice: Become annexed to a stronger adjacent county society which may bear a hyphenated name. This plan will have a two-fold advantage; namely, supplying the doctors of the smaller counties with a good society home, and enriching the larger society. At least, the members of the stronger unit can and should invite their weaker neighbors to meet and discourse with them with mutual benefit. Small societies can confidently expect help from their neighbors for the mere asking, if they cannot find interest within themselves. Fortunately, good roads and fast cars have removed the disadvantages of distance and time expenditure.

Another cause of incoordinate and dormant county societies seems to be a lack of sensible responsibility for professional success, both individually and collectively. While not all of the physicians in any community feel this way, some of them do, and as long as that feeling exists, the unit is weakened. Please try to realize that each county society is a fundamental unit of the State Association, and each unit is either a burden or a burden-bearer; thus the responsibility becomes apparent. Through the inherent sincerity of each member, we may supply the material for perfect units to be placed in the main structure, which is the Indiana State Medical Association. Then, when every other state has done as much for the American Medical Association, the American medical profession easily can blaze the way for medical progress in an unheard-of fashion.

Recently I have heard another excuse for latency and inactivity on the part of county societies. It was this: "Well, I guess we just don't like each other well enough." The excuse was cruelly frank but immutably true. There we have a cause. What is to be the remedy? And who can administer the remedy? Such antipathy among physicians is uncharitable, illogical, and it is pernicious both to the profession and to the public. It is truly the expression of prejudice, of selfishness, and of ill-advised sociology. However, it is a fact (and one well attested) that the more we get together for the purpose of scientific discussion, the more we recognize our colleagues' good qualities and our own weaknesses.

Medical men are trained and educated in a similar fashion and should speak the same language in the most agreeable style. Much of the antipathy among physicians is bred and nourished by clannish factions within the general populace, by those who might be compared to fans and enthusiasts of prize fighters and who, by vicious gossip, are willing to aid and abet their favorite doctor by the unscrupulous condemnation of other doctors. In such instances, the doctors can do much to cure the evil by expressing professional friendship and sympathetic esteem each for the other. When they meet at the bedside in counsel, the fruition of their ethical conduct and intelligent counsel and help expresses itself in honor and prestige, as well as in satisfactory financial compensation.

No intelligent public will fully respect the physicians of a community when the physicians refuse to respect each other and to cooperate in a professional and social way. All of our differences and misunderstandings should be settled among ourselves, privately, not publicly. When our profession is thoroughly organized and our efforts are well coordinated, then, and not until then, may we expect the confidence and prestige in the public mind which will put us in the position of trusted medical and social advisers. This achieved, the public will eagerly seek our advice and gladly cooperate with us in combating not only the evils of ill health, but such evils as cultism, ignorance, superstition, and even questionable governmental policies.

Throughout the state there are some decent, legalized practitioners of medicine who, for some reason, have not become affiliated with the county medical society. Some sort of friendly approach should overcome this difficulty. Our own state medical journal, so ably edited by Dr. Shanklin and his staff, alone should be sufficient argument. The cooperation of every member is needed.



ATTEND YOUR COUNTY SOCIETY MEETINGS REGULARLY THIS YEAR

AUTOMOBILE ACCIDENTS AND THE DOCTOR

EDWARD P. GALLAGHER
Insurance Claims Counsel

With the rise of automobile traffic the problem of the doctor collecting his fees for services rendered to injured persons also has grown proportionately.

In seeking a solution of the problem of the great many unpaid fees in such cases, the physicians have found that in many cases their only hope of collecting at all was through the medium of an automobile insurance company, if the automobile causing the accident was covered by such insurance.

As an attorney specializing in insurance law and in the defense of the automobile damage cases, my experience has readily shown me the help and assistance which the medical profession can render to the automobile insurance interests, and I also believe it true that the automobile insurance interests can be, and I will say have been, of assistance to the medical profession. Whether or not the connection between these two interests has been overestimated is sometimes a question in my mind.

Most doctors are not familiar with the fact that only approximately twenty-five per cent of the automobiles in the United States are covered by automobile liability insurance; therefore, in seventy-five per cent of the accidents neither car is covered by automobile liability insurance and the insurance companies should not be blamed if doctors are not recompensed for their services arising out of these accidents.

It is, therefore, true that in the twenty-five per cent of the accidents that happen, under the law of averages, at least half of these are accidents where the insurance company, in behalf of the driver of the insured car, ought not be forced to make a payment to anyone injured in any other automobile involved in the collision; so that when the whole number of automobile accidents, in which automobile insurance payments are made, are simmered down, it can be easily seen that in proportion to the number of accidents occurring, it is a small percentage indeed.

However, it is in this small percentage of cases that we are interested, and I believe if the medical profession will cooperate with the plans laid down by the joint committees representing the insurance interests and the interests of the physicians, that in a great measure the problem, in so far as the insurance companies are concerned, will be ironed out.

On the supposition that some physicians are unfamiliar with the procedure that was set up and agreed upon between the automobile insurance companies and the committee representing the medical profession, I will set out, briefly, the plan which we ask that the doctors follow.

A written form has been drawn up and is in the hands of the secretary of the Indiana State Medical Association. This form is merely an order whereby the injured party, in the event any cash settlement is reached on account of his injuries, orders the insurance company to turn over to the physician the sum stated as representing his account for services rendered the injured party. This order is signed by the injured party, and the physician should then immediately, when the amount of his service is ascertained, turn this order over to the insurance company so that the company may be better apprised of the wishes of the injured party in the case, and the amount of the physicians' service rendered.

I sincerely believe if more physicians would follow this program that they would have better luck in collecing their fees, at least in those cases where damages are paid by an automobile insurance company.

A standing committee representing both the insurance companies and the medical profession has also been set up so that any grievance which may arise on either side in the working out of this plan may be taken before that committee and settled to the satisfaction of all concerned.

This plan was put into operation two years ago, and I have made a survey of the various automobile insurance companies as to the number of doctors availing themselves of this service, and find, unfortunately, that very few of the physicians have taken advantage of this plan. I can only reconcile this situation under the theory that the physicians have been unfamiliar with this service.

It would be my recommendation, in the future, that all of the doctors who are worried about obtaining their just recompense for services, rendered in applicable cases, have their patients order the insurance company to see that the doctor's fees are protected.

I take this opportunity also to ask, in behalf of the insurance companies, that the medical profession extend to the insurance companies such courtesies as are ethically possible, in giving to the insurance companies a true account of the injuries sustained and the fee for services rendered.

INDIANA MEDICINE IN RETROSPECT

L. G. ZERFAS, M. D.
Historian, Indiana State Medical Association
Indianapolis, Indiana

Sir St. Clair Thomson, of London, relates a good story, told originally by Harvey Cushing, pertaining to a study—or rather to a lack of study—of the history of medicine. "At an annual meeting of the American Medical Association he (Cushing) and G. C. Streeter requisitioned a stall and made an exhibit of books and incunabula associated with Vesalius, the father of modern anatomy, and, one might almost say, the Messiah of the renaissance of medicine. It was alongside of the other stalls exhibiting surgical instruments, baby foods, drugs, and so forth. Over it was written, in large letters, 'Vesalian Exhibit.' It was on view some time before a solitary doctor arrived, laden with his collections from other stalls. He only stopped long enough to inquire: 'Say, are there any samples given away?' 'Samples of what?' he was asked. 'Why, of what you've got here—vaseline, of course.'"

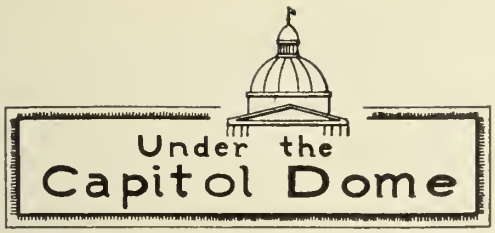
The history of medicine has followed very closely the progress of civilization, since no single individual, no art, no science, no school of thought, and no calling can escape the influences that constitute it. It is equally true that the status of medicine in any given section of the world is dependent upon the development of its people and that, in general, it cannot rise above their advancement.

Nearly a century and a quarter has passed since the introduction of the practice of medicine in the state of Indiana. Kemper, in his history of medicine in Indiana published in 1911, made many valuable contributions, primarily of a biographical nature. Since the time of that publication, astounding developments in the science of medicine have occurred. It seems fitting and proper, therefore, that a more detailed study of the history of medicine in the section of the middle western country, now designated as the state of Indiana, be pursued. Much information has been collected thus far, and the constant pursuit and accumulation of material continues. It is realized that those of the profession who have reached what is often termed "the years that bring the philosophic mind" have available much additional material to contribute, and it is hoped that they will not hesitate to communicate with this office.

Further, the present time seems opportune to take stock of the past, since medicine (as are other factors in our civilization) is undergoing profound changes in a changing world; that history has always served as the anvil on which the new is fused with the old needs no repetition.

It is also hoped that in this age of rapid scientific development we may rescue something of the art of medicine which has had a distinct tendency to disappear from our midst. Unquestionably the art of medicine is one of the oldest in the history of civilization; doubtless it will not be supplanted by any scientific development, however profound, because it has to do with human beings, with all the complexities of personality that constitute such individuals. The combination of the art and the science of medicine is a powerful weapon in the hands of a judicious physician. Since the art of medicine very largely flourished and reached its height by the beginning of the first quarter of this century, any accounting of the history of that period should be of value, especially to the young physician of the present day, who is so apt to be mechanized and intent upon objective and physical findings. He is scarcely to be criticized because of this attitude, since the influence of epochal discoveries through research, the mechanics of recording blood pressure, of making blood counts, x-ray examinations, and microscopic studies have all tended to turn his attention away from the actual nature of the patient. Observations with regard to the pulse, the tongue, the skin, and the thermometer, so much relied upon by the older physician, in addition to an intimate knowledge of the families being attended, have had a distinct tendency to be minimized. It is only natural that this should occur; but that a mean level should be reached between the two extremes of art on the one hand and science on the other is obvious.

Through studies having to do with the nature of the training received by the early physicians of Indiana, the legislative acts influencing and regulating medical practice, the formation of medical societies, the development of hospitals and institutions for the care of the sick, the development of medical education, the history of epidemics, the formation of public health organizations, pioneer practices, and a review of the lives of the many practicing physicians, a fair cross-section of the medical history of Indiana should be obtained. Coupled with these studies must be a considerable knowledge of the educational, social, political, and economic status of the people of Indiana, before a proper evaluation may be placed on the trend of medicine in the state at any given period. From time to time material will be published in this section relative to these various phases of medicine in Indiana. The sponsorship of the Indiana State Medical Association of a personal interest of the writer—namely, a study of the history of medicine in Indiana, is the direct result of the efforts and interests of Doctor William Niles Wishard, Senior, who has by many historical contributions of his own and, indeed, by his long and active medical career actually become to no inconsiderable degree a part of our medical history.



The meeting of the Indiana State Board of Medical Registration and Examination will be held the second Tuesday of the month, January eighth, instead of January first, as was announced in the December issue of THE JOURNAL.

* * *

E.R.A. WORK

Emergency Relief Administration workers are engaged in a number of projects affecting health conditions, either directly or indirectly, in a number of scattered points throughout Indiana.

Among the projects are included renovations to sewer and water distributing systems in some cities. ERA workers are employed in cleaning and repairing all sanitary and storm drainage systems in Wabash. A new sewer on Jackson street in Galveston, Cass County, is being constructed with ERA labor, and the water tower of the waterworks plant of Kentland, Newton County, is being repaired. New water mains and laterals are being laid at Danville, Hendricks County. An ERA relief project in Huntington, Huntington County, includes improvements at the city waterworks plant. A water feed line to boiler and turbine and an exhaust return line from boiler and turbine to river are under construction.

At Elkhart a Red Cross sewing center has been set up in the city hall annex, as a county relief project. Garments are being made in the various townships of Miami County from materials provided by the Red Cross, as a relief project. A shoe repair shop to take care of the shoe repair needs of ERA workers is being operated as a relief project in Monroe County. A relief project being carried on in Barton, Center, Columbia, Patoka, and Union townships, Gibson County, is the sewing of garments from both old clothes and new materials and the quilting and making of comforts and rugs.

Construction of a utility building on the grounds of the United States Veterans' Hospital in Indianapolis is one of the Marion County relief projects.

A three-room cottage and bath-house is being constructed as a permanent isolation hospital at the south end of the sixty-six acre Transient Service Bureau Camp in Evansville. ERA workmen are supplying the labor for the project.

In the Bedford schools in Lawrence County milk and soup lunches are being prepared and served to under-privileged children by ERA workers.

A general clean-up program including ditching, grubbing, fencing, road building, grading, painting, and brush cutting is being carried on as a relief project on the premises of the Indiana State Sanitorium near Rockville in Parke County. About 500 acres of land surround the buildings of the institution.

A brick pavement around the administration building of the United States Veterans' hospital at Marion, in Grant County, is being improved. The trees are being trimmed and the grounds are undergoing a general cleaning.

Surgical supplies are being made and hospital supplies are being mended for the Greene County Hospital in Linton as a relief project.

* * *

CHANGING NAMES

A legal change of name does not in any way affect the standing or profession of the person who changes his name, unless the person is seeking to evade or violate some law, according to an opinion issued by Philip Lutz, Jr., attorney general.

Although the opinion was written for J. M. Hale, secretary-treasurer of the Indiana State Board of Dental Examiners, the conclusion would apply to physicians or members of any other profession.

"The statute provides that upon presentation of a proper petition to the court any person may have his name changed," the opinion pointed out. "This proceeding should not in any way affect the standing or profession of the applicant unless, as stated above, he by so doing, is seeking to evade or violate some law."

* * *

HIGHWAY DETOURS

Less than forty miles of detours are in effect on the state's highway system of more than 8,600 miles, according to James D. Adams, highway commission chairman. With more than 300 different construction projects under way at one time during the late summer, many of them on important highways, work was pushed as rapidly as possible to complete the job and have the highways open for winter traffic. An increase in the number of detours may be expected in the spring when the 1935 highway construction program gets under way.

* * *

HEALTH OFFICERS AND FEES

Dr. Verne K. Harvey, director of the division of public health, has received an opinion from Philip Lutz, Jr., attorney general, in answer to the question: "Is it legal for a county, city or town health officer or his deputy to charge a fee for furnishing written evidence concerning birth or death from the records of his office?"

In reply the attorney general wrote that there is no express provision of law authorizing the charging of a fee by such officers for such a service. In the absence of express authority, fees are not collectable by a public official, the attorney general held.

"On the other hand," he wrote, "it should be noted that the statutes do not require the officers in question to furnish written evidence of, or certified copies of, the records in their respective offices. While they might be required to produce the originals in court under a proper subpoena duces tecum, and likewise are required to allow the right of inspection and the right to make copies of public records to any person having an interest in such records, subject to reasonable regulations, nevertheless the officers themselves cannot be compelled to make copies in the absence of a statutory requirement to that effect."

* * *

BULLETIN ON FOOD VALUES

Bulletins written to aid housewives whose families are on poor relief to choose food with regard to nutritive value are being sent out by the state unemployment relief commission. According to the commission there is expected to be no food shortage during this winter. The bulletin points out that rarely, if ever, is the best meal from the standpoint of health the most expensive. It recommends those foods which supply in satisfying combination, the substances necessary for health and proper nourishment of the body. Additional advice included in the bulletin is to the effect that every food combination for the family should provide for "protective" foods, including milk, vegetables and fruit. The bulletin was prepared by the United States Bureau of Home Economics.

INDIANA DIVISION OF PUBLIC HEALTH

MORBIDITY REPORT FOR MONTH OF NOVEMBER, 1934

Bureau of Communicable Diseases

Diseases	Nov. 1934	Oct. 1934	Sept. 1934	Nov. 1933	Nov. 1932
Tuberculosis	112	154	108	129	149
Chickenpox	438	134	19	590	306
Measles	414	188	71	94	82
Scarlet fever	731	428	234	900	571
Smallpox	12	4	3	12	11
Typhoid fever	31	43	98	41	24
Whooping cough	264	181	134	119	64
Diphtheria	277	256	119	489	243
Influenza	134	78	69	217	271
Pneumonia	29	14	12	58	17
Mumps	14	1	3	24	47
Poliomyelitis	5	7	28	4	4
Meningitis	1	3	4	8	12
Encephalitis	5	7	77	3	1
Undulant fever	4	0	0	1	3

DIPHTHERIA REPORT, NOVEMBER, 1934

As the end of the year approaches it begins to appear that we are going to make the best record for diphtheria that has ever been attained in Indiana, but frankly it is not as good as we had hoped.

To date there have been ninety-six deaths from diphtheria, this period covering the first eleven months of the year. Lawrence County had three and Marion County had two deaths for the month of November. Lawrence has a total of nine deaths for the year, which is very high considering the population of that county. We await with some anxiety the end of the year so that we may determine what has probably been the effect of the activity of the past year in an effort to reduce deaths from diphtheria in the State of Indiana.

Below will be found a report showing the counties reporting deaths for the month of November, and also a summary of the counties reporting deaths so far this year.

County	Nov. 1934	Total 1934
Allen	0	7
Bartholomew	0	2
Delaware	1	4
Blackford	0	1
Cass	0	1
Crawford	0	1
Decatur	0	2
Dubois	0	2
Fayette	0	1
Floyd	1	2
Gibson	0	1
Grant	0	2
Greene	1	3
Harrison	0	1
Howard	1	1
Jackson	0	3
Jasper	1	2
Knox	0	4
Lake	1	5
Lawrence	3	9
Marion	2	13
Marshall	1	1
Martin	0	1
Monroe	0	1
Montgomery	0	1
Newton	1	2
Perry	0	4
Randolph	0	2
Ripley	0	1
Saint Joseph	1	1
Shelby	0	2
Spencer	0	2
Rush	0	1
Tippecanoe	1	1
Warrick	0	1
Vanderburgh	1	4
Vermillion	0	1
Wayne	0	4
Total	16	96

Thurman B. Rice, M. D., Chairman,
Diphtheria Prevention Committee.

SECRETARIES' COLUMN

Mr. Secretary:

Happy New Year! May you have lots of prosperity spread over the year!

January 27, 1935, is going to be a banner day. This is the day that all the secretaries get together to learn about all the medical problems that are not scientific.

When you look at the program in this issue of THE JOURNAL you will see that some very prominent problems are going to be discussed, and by some men who know their subjects from A to Z.

Mark your calendar, bring your medical society president, your councilor, and all the members who will come.

Make this the BIGGEST and BEST secretaries' conference we have ever had!

Until January 27, I am,

Your chairman,

A. M. MITCHELL, M. D.

ALL MEMBERS OF THE INDIANA STATE MEDICAL ASSOCIATION ARE INVITED TO ATTEND THIS SECRETARIES' CONFERENCE. COME IF YOU CAN DO SO.

MEDICO-LEGAL DEPARTMENT

RESPONSIBILITY OF PHYSICIAN IN REGARD TO CHARITY PATIENTS

In response to an inquiry, Mr. Albert Stump, attorney for the Indiana State Medical Association, has written the following:

"It has been held in a number of cases that where a physician undertakes to treat a charity patient his responsibility to the patient for any failure to use proper care and skill is on exactly the same basis as it would be for a paying patient. That may seem a bit harsh, but on further consideration, it will be seen that it is a just principle of law.

"When a physician undertakes to treat a person, he impliedly brings to the treatment of that person the obligation to use proper skill and care and not to neglect the patient to his damage, whether the patient is able to pay or not. But, on the other hand, he does not have to accept any patient. There are no conditions apparently, from the decisions of the courts, under which a physician can be compelled to accept a patient. However, when he does accept a patient, his obligation to that patient is not then dependent upon whether it is a paying patient or not.

VOICE OF MEDICINE

SOCIAL SERVICE RACKET

Dear Editor:

The enclosed editorial appearing in the Indianapolis *Star* of November 23, 1934, shows clearly the necessity for immediate action on the part of medical societies to prevent social service from developing into a racket, if it has not already done so. No business or profession gives more of its time and services to charity than the medical profession and I, for one, am against any plans for government control of our activities.

The time for beating around the bush is past, and we should take action at once by dropping from our societies any physicians who allow their names to be used in connection with state control of medicine.

Let's go now, while we still have the right of free speech.

Respectfully submitted,

W. E. MENDENHALL, M. D.,
Indianapolis.

The editorial follows:

CLASH OVER "STATE MEDICINE."

"Every resident of the United States has a direct personal concern in fundamental public health policies. That interest has been whetted recently by evidence of a controversy brewing over the troublesome question of socialized or state medicine in contrast to the intimate relationships which usually have existed between the physician and the patient. The majority of the medical profession has bitterly opposed the former method as an obstacle in the path of medical progress. The national administration recently has seemed to be leaning strongly toward a socialized public health structure.

"Rumor from Washington intimates that the recent appointment of Miss Josephine Roche, welfare worker formerly of the Children's Bureau, as assistant secretary of the Treasury in charge of public health, may be sufficient to produce the resignation of Surgeon General Hugh S. Cummings, head of the United States Public Health Service under five Presidents. The capital recalls the clash between Dr. Cummings and Miss Grace Abbott, former Children's Bureau chief, which split wide open the Hoover conference on child welfare. Miss Roche and Miss Abbott are close friends who hold identical views on social service matters. Dr. Cummings aligned himself with the medical men who recommended that maternal and infant health activities of the Children's Bureau be transferred to the Public Health Service.

"The attitude of the profession has been set forth in an editorial in the latest *Journal of the American Medical Association*. It reaffirms the organization's stand against socialized medicine and cites the necessity of developing changes in the nature of medical practice 'that will neither break down the quality of medical care nor impede medical progress.' The journal applauded the 'encouraging words' of President Roosevelt on old age pensions and sickness insurance delivered at the recent national conference on security. The President at that time discouraged fantastic schemes and expressed the hope that a sound and uniform system could be provided."

DEATH NOTICES

ARTHUR MONROE MENDENHALL, M. D., of Indianapolis, and his daughter, Miss Evelyn Mendenhall, were killed in an airplane accident at Richmond, Indiana, December fifth. Dr. Mendenhall was fifty years of age.



Dr. Mendenhall, for many years professor of obstetrics in the Indiana University School of Medicine, graduated from the University of Pennsylvania School of Medicine, Philadelphia, in 1909. He conducted a private practice in Jamestown, R. I., where he served as a member of the school board, was school medical inspector, and health officer. After eight years of private practice, he took up the further study of obstetrics, spending a year in the Philadelphia Lying-In Hospital and a year in the New York Lying-In Hospital, and in 1919 he located in Indianapolis where he limited his practice to obstetrics and gynecology.

Dr. Mendenhall was a member of the Indianapolis Medical Society, the Indiana State Medical Association, the American Medical Association, the American Association of Obstetricians, Gynecologists and Abdominal Surgeons, the Central Association of Obstetricians and Gynecologists, the American Board of Obstetrics and Gynecology, and a fellow of the American College of Surgeons. He was a staff member of the Long, Indianapolis City, Florence Crittenden hospitals, the William H. Coleman Hospital for Women, the Indianapolis Methodist Episcopal, St. Vincent's and Christian Hospitals.

Resolutions in memory of Dr. Mendenhall and Dr. Carmack were read before the memorial meeting of the Indianapolis Medical Society, December seventh. Resolutions from the Methodist Hospital Staff Society, typical of the many resolutions presented, include the paragraph: "Because of his inimitable enthusiasm and sincerity as a student in his field; because of his ability to inspire young men to pursue efficiently the study and practice of obstetrics; because he devoted the major part of his time and effort to the promotion of obstetrical standards in this community; and because his literary contributions and activities in national medical associations have given him much general renown; therefore, be it resolved, that the staff society of the Methodist Hospital declares the loss of Dr. A. M. Mendenhall as most unfortunate and quite irreparable to itself and this community."

JOHN WALTER CARMACK, M. D., of Indianapolis, was one of the victims of an airplane crash at Richmond, Indiana, December fifth. Dr. Carmack was forty-nine years of age.



After graduating from the Indiana Medical College, School of Medicine of Purdue University, Indianapolis, in 1907, Dr. Carmack remained in Indianapolis where he had since practiced, limiting his practice to otorhinolaryngology. At the time of his death, he was clinical professor of rhinology, otology, and laryngology in the Indiana University School of Medicine.

Dr. Carmack was an active member of his local society, the Indianapolis Medical Society, and of the Indiana State Medical Association, for which he served as general chairman of the arrangements committee for the Indianapolis session last October. At the 1934 Cleveland session of the American Medical Association, Dr. Carmack was made secretary of the Section on Laryngology, Otology, and Rhinology of the national organization. He was a member of the Indiana Academy of Ophthalmology and Otolaryngology, the American Laryngological Association, the American Laryngological, Rhinological and Otological Society, the American Board of Otolaryngology, and a fellow of the American College of Surgeons. He was a staff member of the Long Hospital, Riley Hospital, Indianapolis City, Methodist Episcopal and St. Vincent's Hospitals. He was unusually active in Boy Scout work, and was a member of the Scout official board and the Scout executive committee. Dr. Carmack served overseas during the World War.

On the evening of December seventh, the Indianapolis Medical Society held a memorial meeting for Dr. Carmack and Dr. Mendenhall. Memorial resolutions adopted by various medical organizations and hospital staffs were read. The following are paragraphs selected at random from the various resolutions:

"It is humanly impossible in words to record the value of such a life, or to adequately describe his greatness; suffice it to say that a truly great man has left our midst."

"For many years his keen interest in the activities of the Indiana University School of Medicine and Hospitals has been an inspiration to both the faculty and student body. His skill, understanding and willingness to serve others make a lasting contribution to our work. His personal attributes

were interwoven with a quiet strength which was based on his talents and fineness of feeling for his fellowman."

SOPHIE S. SOLF, M. D., of Gary, died in a Chicago hospital, December thirteenth, aged fifty years. Dr. Solf graduated from the medical department of the University of Zurich, Switzerland, in 1911.

W. L. ROYSTER, M. D., Indianapolis, died November twenty-fourth, aged fifty-one years. Dr. Royster served as a captain in the Medical Corps during the World War. He was a graduate of the Kentucky University Medical Department, Louisville, in 1906.

J. S. CLAYPOOL, M. D., of Pine Village, died November twenty-fourth, aged eighty-five years.

W. W. HOGGATT, M. D., of French Lick, died November twenty-second. Dr. Hoggatt had retired from active practice and had spent some time in Florida. He was a member of the Orange County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Kentucky School of Medicine, Louisville, in 1896.

J. D. ORAHOOD, M. D., of Indianapolis, died November eighteenth, aged seventy-nine years. He was not in active practice. Dr. Orahood graduated from the Medical College of Indiana, Indianapolis, in 1884.

WILLIAM H. WALLER, M. D., of Angola, died November twenty-sixth, aged eighty-five years. Dr. Waller established his practice in Angola sixty-two years ago and was widely known. He retired from active practice fifteen years ago, but until his retirement he was a member of his local (Steuben County) medical society as well as the state and national associations. Dr. Waller graduated from the Detroit Medical College in 1874.

ROBERT JOHN BICKEL, M. D., of Fort Wayne, died November seventeenth, aged thirty-one years. Dr. Bickel graduated from the Indiana University School of Medicine in 1931.

JAMES M. SHIELDS, M. D., of Seymour, died in New York, November thirtieth. Dr. Shields had practiced medicine in Seymour since 1881. He had served two terms as mayor of the city and also had served as secretary of the Board of Health for several years. Dr. Shields was a member of the Jackson County Medical Society, the Indiana State Medical Association and a fellow of the American Medical Association. He graduated from the Kentucky School of Medicine, Louisville, in 1881.

DANIEL SIGLER, M. D., of Elwood, died December seventeenth, aged ninety-one years. Dr. Sigler had practiced in Elwood since 1880. He graduated from the Miami Medical College, Cincinnati, in 1874.

JOHN C. BOTTORFF, M. D., of Corydon, died December fifteenth, aged sixty-eight years. Dr. Bottorff graduated from the University of Louisville School of Medicine in 1896. He was a member of the Floyd County Medical Society, the Indiana State Medical Association, and a fellow of the American Medical Association. Dr. Bottorff was president of the Third District Medical Society at the time of his death.

HOOSIER NOTES

DR. A. E. BURKHARDT has been appointed surgeon for the Lake Erie district of the Nickel Plate Railroad.

DR. THURMAN B. RICE of Indianapolis addressed members of the Union City Rotary Club, December eleventh.

DR. E. G. BOUNELL of Hillsboro has opened an office in Veedersburg. He will divide his time between his two offices.

DR. GEORGE REEL has resigned his position at the Muscatatuck Farm Colony to go into private practice at Bluffton, Ohio.

MISS MARY ELIZABETH RICKARDS of Indianapolis and Dr. R. Robert Richardson of Monon were married in Indianapolis, December sixth.

DR. JOHN OWENS, who has been located at Newtown, has moved to Veedersburg to take over the practice of the late Dr. E. W. Kirk.

DR. R. L. SENSENICH of South Bend addressed a meeting of the Mishawaka Lions Club, December sixth, on the subject of "Sickness Insurance."

MARY EATON SHORT and Lt. Col. I. M. Casebeer, Aux.-Res. U. S. Army, of Clinton, Indiana, were married at Rockville, Indiana, October twentieth.

DR. J. S. RINEHART, former Carroll County physician, who has been practicing in Plainview, Texas, has returned to Flora, where he will resume his practice.

DR. W. M. VARBLE of Jeffersonville has been under treatment for a fractured hip which he suffered December tenth when he slipped and fell on an icy pavement.

DR. G. A. OWSLEY, who has been stationed at Fort Benjamin Harrison in the station hospital, has moved to Hartford City, where he will take over the practice of the late Dr. John H. French.

DR. E. M. SHANKLIN, of Hammond, has resigned as councilor for the Tenth District. Dr. N. K. Forster, of Hammond, has been appointed to complete the unexpired term, which ends December 31, 1935.

DR. GORDON A. THOMAS of Lafayette has been appointed a member of the Board of Managers of the William Ross Memorial Sanatorium in Lafayette. He succeeds Dr. R. M. Campbell, whose term expired last month and who is moving to Chicago.

DR. HARMON BRUNER, Michigan City prison physician since 1929, has resigned the post to take some special postgraduate work in Philadelphia. His successor is Dr. John R. Miller, of Indianapolis, former army surgeon, who will serve as an aid to Dr. P. H. Weeks, prison physician.

DR. E. L. LIBBERT of Lawrenceburg has been appointed company surgeon for the eastern and western lines of the Baltimore and Ohio Railroad. He succeeds his father, the late Dr. E. J. Libbert of Aurora, who held the position for nearly thirty years.

DR. L. W. BROWN, Fort Wayne, has moved to Indianapolis where he has been transferred by the Pennsylvania Railroad Company to succeed the late Dr. Oliver P. Mercer. Dr. H. L. Phillips, of Chicago, succeeds Dr. Brown in the Fort Wayne appointment.

DR. LOUIS BELDEN was elected president of the Seventh District Medical Society at the meeting held December thirteenth in Martinsville. Other officers elected are: Vice-president, Dr. M. C. Pitkin, Martinsville; secretary, Dr. Gordon Batman, Indianapolis.

DR. R. G. IKINS, Lafayette, was made chief of the staff of St. Elizabeth's Hospital, Lafayette, at the annual meeting held December sixth. Other members of the executive staff are Dr. W. M. Reser, Dr. M. G. Frasch, Dr. H. N. Swezey, and Dr. F. T. Romberger. At this meeting Dr. H. C. Sweany of Chicago spoke on "Cancer of the Lungs."

DR. CARL H. MCCASKEY has been made head of the department of otolaryngology of the Indiana University School of Medicine to succeed the late Dr. John W. Carmack. Dean W. D. Gatch also has announced the appointment of Dr. D. O. Kearby as head of the newly created department of bronchoscopy and esophagoscopy. Dr. Kearby has been in charge of this department at the Riley Hospital since its establishment in 1928.

A MEETING of the official board of the Jay County hospital and of Jay County physicians was held at Portland, December twelfth. Dr. E. M. VanBuskirk of Fort Wayne was the principal speaker, his subject being "X-ray in the Community." Forty-five guests attended. Other speakers were Miss Helen Wilbur, superintendent of the hospital; Mrs. Mabel Yarbrough, vice-president of the hospital board, and Drs. F. E. Keeling and Ernest Parks of Portland.

DR. WILLIAM F. KING, Indianapolis, has been elected chairman of the Indiana World Peace Committee, succeeding Dr. Stanley Coulter, dean emeritus of Purdue University, who was made chairman emeritus. Dr. Simon Reisler, Indianapolis, was made treasurer of the committee. The committee pledged itself to efforts to bring acceptance of the World Court before Congress and to work toward renewed activity in the Senate munitions inquiry.

THE Indiana Society for Mental Hygiene held its nineteenth annual meeting in Indianapolis, December seventh and eighth. Speakers included Dr. Charles P. Emerson, Indianapolis; Mr. Wayne Coy, director of Indiana Department of Public Welfare; Dr. L. P. Harshman, Fort Wayne; Dr. Max A. Bahr, Indianapolis; Dr. Frank Alexander, Chicago; Dr. Frank F. Hutchins, Indianapolis; Dr. Harriet E. O'Shea, Lafayette; Dr. Gladys Frith, South Bend, and Dr. Temple Burling, Winnetka, Ill.

BLANKS have been mailed asking for names of new officers of county medical societies, and names of members of the legislative committees of county societies. It is urged that these blanks be completed and returned to the headquarters office immediately, for the state legislature will be in session starting in January, 1935; every county society should have an active legislative committee

this year, and the committee members should be known in the headquarters office of the Indiana State Medical Association.

THE Indiana Academy of Ophthalmology and Otolaryngology held its annual meeting in Richmond on Wednesday, December twelfth, in the Richmond-Leland Hotel. A number of papers were read by members, and Dr. Luther C. Peter, of Philadelphia, gave a talk in the afternoon and also was a speaker at the banquet in the evening. The Academy voted to hold its yearly meeting the second Wednesday in April, beginning in 1935. The 1935 meeting will be held in Indianapolis. The following officers were elected: President, O. G. Brubaker, North Manchester; first vice-president, B. N. Lingeman, Crawfordsville; second vice-president, Carroll O'Rourke, Fort Wayne; secretary-treasurer, F. V. Overman, Indianapolis (re-elected); Council members, J. K. Leasure, Indianapolis, and E. E. Holland, Richmond.

THE Middle Section of the American Laryngological, Rhinological and Otological Society will be held January twenty-third, at the Indianapolis Athletic Club. The untimely death of Dr. John Carmack prevented him from completing the arrangements, as chairman, for this meeting, and Dr. Perry G. Goldsmith, of Toronto, president of the society, has appointed Dr. Daniel W. Layman, of Indianapolis, to succeed Dr. Carmack as vice-president of the society which office includes the duties of chairman of the Middle Section for the remainder of the 1934-1935 term. Speakers for the meeting, to be held this month in Indianapolis include Dr. Edward King, of Cincinnati; Dr. Thomas C. Galloway, of Evanston, Illinois; Dr. E. W. Hagens, of Chicago; Dr. Joseph C. Beck, of Chicago; Dr. Austin Hayden, of Chicago; Dr. Lyman Meiks, of Indianapolis; Dr. Perry G. Goldsmith, of Toronto, Canada; Dr. Samuel Iglauer, of Cincinnati, and Mr. R. N. Harger, of Indianapolis. Visiting members will be guests of the Indianapolis Ophthalmological and Otolaryngological Society at an informal dinner in the evening.

WARNING

A SECRETARY of a county medical society reports that a man, apparently about sixty years of age, gray-haired, unlicensed to practice in Indiana, has been associating himself with osteopaths in small Indiana towns for the purpose of treating sinus cases and diseased prostates. The secretary reports that "his technique for operating sinuses, according to our best information, is as follows: He makes a diagnosis of sinus trouble on the patient, then explains to the patient that his usual fee is several hundred dollars for the operation if it is done in his main office, but since he is here through the courtesy of the local osteopath he will do that operation for the mere sum of $250 cash." His practices are clearly out of line with the accepted standards of treatment. He is on the move at the present time, and it is believed that he may associate himself with another osteopath or chiropractor in Indiana. If you hear of this man in your community, please notify the Indiana State Board of Medical Registration and Examination in Indianapolis.

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories
- Sulpharsphenamine—Abbott, 0.1 gm. ampules
- Sulpharsphenamine—Abbott, 0.5 gm. ampules
- Sulpharsphenamine—Abbott, 0.8 gm. ampules

Wm. S. Merrell Company
- Diphtheria Toxin for the Schick Test, Diluted with Peptone Solution and ready for use
- Diphtheria Toxoid
- Diphtheria Toxoid, Alum Precipitated (Refined)
- Typhoid Vaccine

H. A. Metz Laboratories, Inc.
- Holocaine Solution 1 per cent

Sandoz Chemical Works, Inc.
- Ampules Gynergen Solution 1:2000, 0.5 cc.

G. D. Searle & Co., Inc.
- Tablets Procaine Borate and Epinephrine

Sharp & Dohme
- Rabies Vaccine (Phenol Killed) Mulford, 7 vials package

Frederick Stearns & Co.
- Insulin Stearns, 100 units, 10 cc.

Ulmer Pharmacal Co.
- Sodium Morrhuate 5% Solution with Benyzl Alcohol (Ulmer) 5 cc. vials
- Sodium Morrhuate 5% Solution with Benyzl Alcohol (Ulmer) 20 cc. vials

---

INDIANA UNIVERSITY NEWS NOTES

THE football team of the Indiana University School of Medicine defeated the Indiana University Law School gridiron team, 7-0, in the annual medic-law football game held Saturday, November third, the morning of the Iowa-Indiana homecoming football game at the state university.

DECEMBER seventh, second-year pre-medical students at Indiana University took the standard aptitude test of the Association of American Medical Colleges. All students expecting to apply for entrance to a medical school in the fall of 1935 took the examination. This test has been adopted by the association as one of the normal requirements for admission to a medical school.

THE Theta Kappa Psi, professional medical fraternity at Indiana University, has announced the following pledges: Don R. Miller, Rochester; Meredith Gossard, Kempton; Albert Malone, El-

nora; A. Lee Hickman, Hammond; Crystal Slick, Hollansburg, Ohio; Clyde Seeley, Jonesboro; Hugh Shown, Mishawaka; Leo See, Macy; Ernest Rosenbarger, Corydon; Lester Reed, Vincennes; Arnold Ladig, Fort Wayne; Fenton Joyce, Brookline, Mass.; Robert Byrne, Bicknell; Fielding Williams, Dale.

PHI RHO SIGMA, professional medical fraternity at Indiana University, has announced the pledging of the following first-year medical students: Glynn Rivers, Muncie; William Lybrook, Galveston; Howard Remack, Greenfield; Richard Nay, Muncie; James Pierce, LaPorte; Morris Thomas, Muncie; Thurston Harrison, Indianapolis; W. K. Dyer, Evansville; Robert Maschmeyer, Indianapolis; James Orr, Indianapolis; Lyman Eaton, Indianapolis; John McClellan, Muncie; Gilbert Baird, Kokomo, and Jed Pearson, Indianapolis.

NU SIGMA NU, professional medical fraternity at Indiana University, has announced the pledging of the following students at the state university: William Rossman, Cairo, Ill.; Lester Montgomery, Plymouth; John Atwater, Indianapolis; Charles McCormick, Indianapolis; Rudolf Myers, Bloomington; Edward Smith, Petersburg; Thomas Gill, Michigan City; John Kraning, Monticello; Ben Siebenthal, Bloomington; George House, Indianapolis; Richard Woolery, Bedford; Richard Schug, Decatur; Karl Mast, Angola; Stan Garner, Indianapolis; James Burke, Decatur; Keith Hammond, French Lick; Arthur Adams, West Lafayette; Edwin Trook, Marion; Bob Acher, Terre Haute, and Leslie Baker, Aurora.

DR. ARLIE R. BARNES and Dr. B. R. Kirklin, graduates of the Indiana University School of Medicine and now members of the staff of the Mayo Clinic, at Rochester, Minnesota, have sailed for Europe where they will do further study. They are being sent by the Mayo Clinic. Dr. Kirklin, who received the M. D. degree from Indiana University in 1914, is head of the x-ray department at the Mayo Clinic, and Dr. Barnes, who was graduated from the Indiana University Medical School in 1919, is head of the Mayo division of cardiology.

Dr. Barnes and Dr. Kirklin, accompanied by their wives, sailed on the S. S. Manhattan. They will visit medical men in Berlin, Leipzig, Munich, Vienna, Florence, Rome, Naples, Paris, London and Edinburg.

THE three Indiana University hospitals in Indianapolis served 175 more patients during September of this year than during September of 1933. A total of 1,227 patients was served by the hospitals this September as compared with 1,052 taken care of last September.

Seven hundred and ninety of these people were bed patients confined to the hospitals and the remaining 437 were out-patients. The number of out-patient visits made was 3,720 for September of this year as compared with 2,251 last September.

The James Whitcomb Riley Hospital for Children served 601 patients, the Robert W. Long Hospital 343, and the W. H. Coleman Hospital for Women 283. The laboratory examinations for September numbered 9,221 as compared with 7,107 for September, 1933.

BOOK REVIEWS

BOOKS RECEIVED

THE 1934 YEAR BOOK OF GENERAL MEDICINE. Edited by George F. Dick, M. D., Lawrason Brown, M. D., George R. Minot, M. D., William B. Castle, M. D., William D. Stroud, M. D., and George B. Eusterman, M. D. 843 pages; cloth. $3.00. Year Book Publishers, Inc., Chicago.

* * *

SURGICAL CLINICS OF NORTH AMERICA. Lahey Clinic Number, October, 1934, Volume 14, Number 5. Octavo of 260 pages, with 72 illustrations. Per clinic year, February, 1934, to December, 1934, paper, $12.00; cloth, $16.00. W. B. Saunders Company, Philadelphia and London, 1934.

* * *

MANUAL OF CLINICAL LABORATORY METHODS. By Pauline S. Dimmitt, Ph. G., medical technologist for the Stout Clinic, Sherman, Texas. 156 pages with 36 engravings, including 7 full page colored plates. Cloth. Price, $2.00. F. A. Davis Company, Philadelphia, 1934.

* * *

THE HEART VISIBLE. A Clinical Study in Cardiovascular Roentgenology in Health and Disease. By J. Poleviski, M. D., attending physician and cardiologist, Newark Beth Israel Hospital. 207 pages with 122 illustrations. Cloth. Price, $5.00. F. A. Davis Company, Philadelphia, 1934.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION
EXECUTIVE COMMITTEE

November 18, 1934.

Roll call showed the following present: H. H. Wheeler, M. D.; E. E. Padgett, M. D.; O. O. Alexander, M. D.; W. J. Leach, M. D.; R. L. Sensenich, M. D.; E. M. Shanklin, M. D.; A. F. Weyerbacher, M. D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary. Guests, A. M. Mitchell, M. D., and V. K. Harvey, M. D., director, State Division of Public Health.

In the absence of Dr. William H. Kennedy, Dr. O. O. Alexander presided. The next meeting date of the committee was set for Sunday, December 16, at two o'clock.

Membership Report

Number of members on November 17, 1934.....	2,724
Number of members on November 17, 1933.....	2,680
Gain over last year.....	44
Number of members on December 31, 1933.....	2,715

Dr. Shanklin stated that THE JOURNAL will make a drive to have the secretaries make a special effort to get memberships in early and to get the younger men who come into the county into their county society as soon as possible in order that these younger men do not have the opportunity of drifting away from medical organization.

BOSTON MEDICAL LIBRARY SEP 17 '37

The monthly statements of Receipts and Expenditures in September and October and the report of the Budget for September and October for the Association committees and THE JOURNAL were presented.

Recommendations in Regard to Health Administration in Indiana

Verne K. Harvey, M. D., director of the State Division of Public Health, appeared before the Committee and read his recommendations for public health organization in this state. These recommendations are to be presented to a special committee on state administration that has been appointed by the Governor. The members of the Committee were to study these suggestions of Dr. Harvey and make a report in regard to their suggestions at the next meeting of the Committee.

Diphtheria Immunization Campaign

The following resolution in regard to diphtheria immunization was adopted by the Committee:

The Executive Committee of the Indiana State Medical Association recommends that diphtheria immunization be continued through education of the laity by the local county medical society.

A copy of this resolution was to be sent to Dr. O. N. Torian, chairman of the Child Health Committee of the Indiana Advisory Health Council.

Actions Left Over from 1934 Annual Session, Indianapolis

Numerous letters from guests complimenting the Indiana State Medical Association upon the meeting were read to the Committee. The Committee instructed the secretary to send a personal letter to Dr. Carmack, chairman of the General Arrangements Committee, thanking him for the splendid work of his committee which contributed so largely to the success of the Indianapolis meeting.

Actions of House of Delegates and Council:

(a) Approval of tuberculosis campaign by House of Delegates. This matter is in the hands of the Publicity Bureau.

(b) Creation of a section on anesthesia.

(c) Committee on expert testimony. Dr. Padgett and Dr. Leach appointed the following men to serve upon this committee:

Max Bahr, M. D., Indianapolis, chairman
E. O. Asher, M. D., New Augusta
A. F. Knoefel, M. D., Terre Haute
W. F. Kelly, M. D., Indianapolis
Albert Stump, Indianapolis, ex-officio

The secretary was instructed to send a copy of the minutes of the House of Delegates creating this committee to the president of the State Bar Association and also to send a letter notifying the members of the state committee who are named above of their appointment.

(d) Traffic Accident Committee created. This committee is to be appointed by Doctor Leach, president 1935.

(e) Report of Reference Committee on Medical Education and Hospitals concerning lowering costs of hospital services. The Reference Committee's report in regard to this matter is to be brought to the attention of the 1935 standing committee of the State Association on Medical Education and Hospitals.

(f) Report of the Committee on Lye Burns in Children. This report suggested that the pamphlet on lye burns be published immediately. The Executive Committee feels that it would be much better to have newspaper releases prepared upon this subject and disseminated through the Publicity Bureau.

(g) Amendments to Constitution and By-Laws. The amendment which clarifies the present conflicting provisions contained in the By-Laws concerning the Council was referred to the mid-winter meeting of the Council.

Letter from Indianapolis Convention Bureau in regard to registration. This letter states that many men attended the meeting who did not register. The Executive Committee suggests that at the next meeting the doors be properly policed and only those who are properly registered be allowed to attend the meetings.

1935 Meeting at Gary

(1) The following dates were set for the meeting—Tuesday, Wednesday and Thursday, October 8, 9 and 10, 1935.

(2) The secretary was instructed to prepare an outline so that the proper report in regard to the 1935 meeting may be made to the midwinter meeting of the Council by the officers of the Lake County Medical Society.

(3) The Executive Committee recommends that the Council suggest type of program and make any further suggestions necessary to the Program Committee in regard to the 1935 meeting.

(4) Folder of the Minnesota State Dental Association presented to the Committee showing what one state society can do in developing a meeting of national interest.

Future Medical Meetings

(1) Council to meet Sunday, January 13, 1935.

(2) Annual secretaries' conference to be held Sunday, January 20, or January 27, 1935.

Automobile Accident Legislation

Mr. Stump makes the following recommendation:

"Further study of this situation has brought us to the view that there should be a bill introduced in the next session of the Legislature authorizing the expenditure of funds derived from the gasoline or automobile taxes for the payment of physicians, ambulances and hospitals for services rendered to those injured on the highways. The situation is becoming sufficiently serious that a great many doctors are reluctant to answer calls, and emergencies exist where immediate assistance should be provided with some assurance that those rendering the services will be compensated. We have not completed our investigation of the manner in which this bill should be drafted, that is, whether it should be as an amendment to some existing law or an independent bill, and in either event what the method should be through which the funds could be paid to the doctor, hospital or ambulance operator."

The Executive Committee instructed the secretary and Mr. Stump to bring this matter to the attention of the insurance and the hospital group.

FERA Work

(1) Conference with Mr. Coy arranged by Dr. Crockett and the secretary for Monday, November 19, to discuss the establishment of rules and regulations which will be more equitable to the members of the medical profession and the public at large in regard to medical services rendered the indigent sick.

(2) Letter received from Dr. R. G. Tuck, director of the Medical Division of the Emergency Welfare Relief Commission of Pontiac, Michigan. The secretary is to receive complete details upon the methods of procedure used in taking care of the indigent sick in Pontiac, Michigan.

Sickness Insurance

(1) Confidential letters and other correspondence from the American Medical Association in regard to the status of sickness insurance at Washington brought to the attention of the Committee. The Committee discussed this subject, particular attention being given to the activities of the Committee on Economic Security along health insurance lines.

(2) Letters asking for more information in regard to the Indiana contact plan brought to the attention of the Committee. The secretary was instructed to give more complete information to the doctors who requested it and to suggest that key men see each of these men requesting information in regard to the contact plan.

BUREAU OF PUBLICITY

October 26, 1934.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D.; J. H. Stygall, M. D.; and T. A. Hendricks, executive secretary.

Release for publication in Thursday papers, November 8, "A Word to Hunters," approved by the Bureau.

Radio releases:

Saturday, October 13—"Hoosierland's Health Harvest."

Saturday, October 20—"Ventilation."

Report on medical meeting:

October 8—Gibson County Medical Society, Princeton, Indiana. "Injuries to the Head." Twenty-five present.

The attention of the Bureau was called to the following action taken by the House of Delegates of the Indiana State

Medical Association at the eighty-fifth annual session at Indianapolis:

(1) The report of the Reference Committee on Publicity follows:

"Dr O. R. Spigler, chairman of this committee, reviewed the report of the Bureau of Publicity as printed in the handbook, enumerating the many duties and accomplishments of the Bureau since its formation in 1922, and particularly in the past year. He paid tribute to Dr. William N. Wishard for his valuable work in organizing the Bureau and for the many hours and the effort he had given to the work of the Bureau.

"Dr. Spigler stressed particularly the historical work of the Bureau, quoting from the Bureau's report, as follows:

" 'Starting with January, 1935, the historian of the Association will have short articles of historical value in THE JOURNAL from time to time. Any information of historical interest should be sent either directly to the historian or to the Bureau of Publicity.

" 'Interest in the history of medicine in Indiana has been on the increase and during the past year a number of county societies have, on their own initiative or at the suggestion of the Bureau, appointed a special committee of the county to compile historical data of local medical interest and to prepare a pamphlet on that subject. Several articles on medical history have appeared in THE JOURNAL, written by authors other than the state historian, the merit of which the Bureau wishes to commend.'

"Your committee recommends the acceptance and adoption of this report as found in the handbook.

"The report of the State Fair Committee as it appears in the handbook is recommended for acceptance and adoption.

O. R. SPIGLER, Chairman.
M. F. BOULDEN.
C. A. STAYTON.
T. R. OWENS.
RUSSELL LAVENGOOD."

This report was adopted by the House of Delegates.

(2) The House of Delegates passed the following resolution, authorizing a tuberculosis campaign:

"As the Advisory Health Council of the State of Indiana has approved a tuberculosis campaign to be presented to the Indiana State Medical Association for its consideration; therefore, be it

"*Resolved*, That a tuberculosis campaign for the State of Indiana be approved by the House of Delegates, to be conducted through cooperation with the district and county medical societies and the State Division of Public Health, and the Advisory Health Council of the same, and through physicians in the state who are particularly interested in tuberculosis problems."

This resolution was presented upon behalf of the Bureau of Publicity.

(3) The House of Delegates approved a resolution concerning the increase in traffic accidents. This resolution, which follows, was presented as a supplement to the annual report of the Bureau of Publicity:

"WHEREAS, Organized medicine, in keeping with its traditional solicitude for the public health in the field of preventive medicine; and,

"WHEREAS, The mounting toll of traffic accidents resulting in an appalling record of deaths and serious injuries, a considerable number of which are caused by well known traffic hazards which have been allowed to remain in our public highways and streets; therefore, be it

"*Resolved*, That the Indiana State Medical Association, through its House of Delegates, acutely conscious of its responsibility in the field of preventive medicine, initiate an active cooperation with other safety agencies for the elimination of all unwarrantable traffic hazards; and be it further

"*Resolved*, That a committee be appointed to formulate practical plans for the participation of the State Association in a movement to reduce the menace to life and health in traffic accidents."

The Bureau of Publicity instructed the secretary to compose a letter which was to be sent to the chairman of the Committee on Child Health, concerning the tuberculosis campaign. This letter was to ask that a meeting be called for formulating plans for such a campaign. This committee then is to report back to the Bureau of Publicity.

Reports from the various counties on the number of health talks given by members of the county medical societies during the months of July, August, and September:

County	Number
Carroll	2
Cass	2
Delaware-Blackford	5
Fountain-Warren	1
Hancock	2
Jennings	1
Lawrence	3
Pulaski	6
Randolph	2
St. Joseph	2
Tippecanoe	8
Vanderburgh	2
Vigo	15

Newspaper clippings were reviewed by the Bureau.

* * *

November 2, 1934.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D.; and T. A. Hendricks, executive secretary.

Release, "Common Sense and the Common Cold," presented for approval of the Bureau. The Bureau instructed the secretary to gain further information from certain other physicians in regard to this release.

Request for speaker:

November 13—Fayette-Franklin County Medical Society, Connersville, Indiana. Speaker obtained to speak upon "Common Skin Diseases."

Letter received from Plymouth, Indiana, asking if the Bureau of Publicity would supply speakers for meetings of the Indiana Federation of Business and Professional Women.

The following letter was sent to the chairman of the Child Health Committee of the Indiana University School of Medicine:

"The following resolution was presented as a supplemental report of the Bureau of Publicity of the Indiana State Medical Association and was passed at the annual meeting of the House of Delegates of the Association in session October 9, 10, and 11:

" 'As the Advisory Health Council of the State of Indiana has approved a tuberculosis campaign to be presented to the Indiana State Medical Association for its consideration; therefore, be it

" '*Resolved*, That a tuberculosis campaign for the State of Indiana be approved by the House of Delegates, to be conducted through cooperation with the district and county medical societies and the State Division of Public Health, and the Advisory Health Council of the same, and through physicians in the state who are particularly interested in tuberculosis problems.'

"The Bureau suggests that you, Dr. Rice and Dr. Stygall, prepare and submit to it a list of names of men interested in this campaign. It is the thought of the Bureau that these men should then be called to a meeting to formulate a plan for such a tuberculosis campaign as provided for in the above resolution. The plans adopted at such a meeting may then be presented to the Bureau of Publicity. The Bureau then will be very pleased to make any recommendations or suggestions concerning the proposed plans.

"We wish to assure you that the Bureau desires to cooperate in every way possible in this matter, and it will be pleased to give to the profession from time to time information concerning the campaign."

Letter received from the Assistant Surgeon General of the Division of Venereal Diseases in regard to pamphlets containing venereal disease information. It was suggested that this be sent to the editor of THE JOURNAL of the Indiana State

Medical Association and that perhaps a news item concerning this information could be published in THE JOURNAL.

* * *

November 23, 1934.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D.; and Thomas A. Hendricks, executive secretary.

Release for publication, Saturday, December 8, to be rewritten and presented to the Bureau at its next meeting.

Radio releases:

Saturday, October 27—"Cold Facts."

Saturday, November 3—"A Word to Hunters."

Saturday, November 10—"Observe Health Rules in Prevention of Colds."

Saturday, November 17—"Depression and Appendicitis."

Reports on medical meetings:

November 5—Woman's Auxiliary to the Vigo County Medical Society, Terre Haute, Ind. "Your Child's Health." Approximately seventy-five present.

November 13—Fayette-Franklin County Medical Society, Connersville, Ind. "Common Skin Diseases." Fifteen present.

The Executive Committee recommends that no pamphlet be printed by the Committee on Lye Burns in Children, but that suitable publicity be given to this subject in the daily press. The minutes of the meeting of the Executive Committee on November 18, 1934, contain the following paragraph upon this subject:

"Report of the Committee on Lye Burns in Children. This report suggested that the pamphlet on lye burns be published immediately. The Executive Committee feels that it would be much better to have newspaper releases prepared upon this subject and disseminated through the Publicity Bureau."

The secretary was instructed to communicate with the chairman of the Committee on Lye Burns in Children and ask the committee to supply suitable material for newspaper publication.

Letters from the public that appeared in the November 19 number of a national weekly publication under the heading, "A. M. A. Flayed," brought to the attention of the Bureau of Publicity. The Bureau suggested that a copy of the magazine containing the letters in question be forwarded to the American Medical Association, asking if any answer has been made by that body to the statements contained in these letters.

Article upon "Tuberculosis and the School Child," which appeared in the November issue of the *Indiana Parent-Teacher*, brought to the attention of the Bureau.

Questionnaire from the American Child Health Association in regard to radio health talks brought to the attention of the Bureau. The Bureau instructed the secretary to answer this questionnaire.

SOCIETY REPORTS

ADAMS COUNTY MEDICAL SOCIETY held a meeting December eleventh at the Adams County Hospital in Decatur, with Drs. L. T. Rawles and E. M. Van Buskirk of Fort Wayne as guest speakers.

* * *

BARTHOLOMEW COUNTY MEDICAL SOCIETY met at the office of J. K. Hawes in Columbus, December twelfth, for election of officers, which resulted as follows:

President, A. M. Kirkpatrick, Columbus.
Vice-President, H. J. Norton, Columbus.
Secretary-Treasurer, J. K. Hawes, Columbus.

* * *

CARROLL COUNTY MEDICAL SOCIETY met at Burrows, November ninth, with sixteen present. Dr. Ruschle described a new method of x-ray used in fractures of the hip. At the December fourteenth meeting, Dr. E. O. Asher, of New Augusta, discussed "Practical Treatment of Pneumonia."

* * *

CASS COUNTY MEDICAL SOCIETY members met at Logansport, November sixteenth, with Dr. J. O. Ritchie of Indianapolis, as principal speaker. His subject was "Arthritis." Attendance numbered thirty.

CLINTON COUNTY MEDICAL SOCIETY met at the Coulter Hotel, Frankfort, October fourth, with Dr. Charles J. Adams, Kokomo, as guest speaker. His subject was "Ionization Treatment of Allergy and Allergic Conditions."

The November twenty-second meeting of the Clinton County Medical Society was held jointly with the Clinton County Hospital staff, with twenty-two physicians present. Dr. William F. McBride, of Dayton, and Dr. F. S. Crockett, of Lafayette, were guest speakers. Dr. S. B. Sims presented some reminiscences of a long life in the practice of medicine. Dr. McBride described the ups and downs and joys and sorrows of a small country community and practice, his subject being, "The Country Doctor—Forty Years of It." Dr. Crockett talked briefly about state and national activities.

The December meeting of the Clinton County Medical Society was held at the Coulter Hotel, December sixth, with an attendance of eighteen. The financial report for the Ninth District and the yearly report of the secretary-treasurer was read. A committee, appointed to confer with the township trustee in efforts to settle any differences, was continued. Officers were elected, as follows:

President, H. R. Royster, Frankfort.
Vice-President, C. A. Robison, Frankfort.
Secretary-Treasurer, I. E. Carlyle, Sedalia.

A symposium on "Peptic Ulcer" was presented by Drs. F. D. Pyke, F. A. Loop, R. G. Ikens, and F. T. Romberger, who discussed the subject from the standpoint of medicine, x-ray, surgery, and anesthesia.

* * *

DAVIESS-MARTIN COUNTY MEDICAL SOCIETY met at the Daviess County Hospital, November twenty-seventh. Dr. P. E. McCown, Indianapolis, presented the principal address.

* * *

DEARBORN-OHIO COUNTY MEDICAL SOCIETY members met at Lawrenceburg, December sixth, for a dinner meeting. Judge William D. Ricketts, of Rising Sun, told of the early history of medicine in Dearborn and Ohio counties. Thirty members were present. This was the annual banquet, and officers for 1935 were elected, as follows:

President, C. W. Olcott, Aurora.
Vice-President, J. M. Pfeifer, Lawrenceburg.
Secretary-Treasurer, E. L. Libbert, Lawrenceburg.

* * *

DEKALB COUNTY MEDICAL SOCIETY members met at the Hotel Auburn, Auburn, December sixth. Mr. Carl Stollman, county superintendent of schools, discussed "Public Health Nursing." Officers of this society for 1935 are:

President, Harold Nugen, Auburn.
Vice-president, D. M. Hines, Auburn.
Secretary-treasurer, J. P. Showalter, Waterloo.

* * *

DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY held a Christmas party December eighteenth at the Hotel Roberts, Muncie. Physicians and their families were entertained.

* * *

ELKHART COUNTY MEDICAL SOCIETY members met at the Hotel Elkhart, Elkhart, December sixth, to hear Dr. Leon Zerfas, Indianapolis, discuss "Endocrine Therapy." Attendance numbered fifty. Annual election of officers resulted as follows:

President, I. J. Markel, Elkhart.
Vice-President, F. M. Freeman, Goshen.
Secretary-Treasurer, S. T. Miller, Elkhart.

* * *

FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY members met at the McFarlan Hotel, Connersville, December eleventh, to hear Dr. H. D. McIntyre, of Cincinnati, discuss "Encephalitis." Attendance numbered fifteen. Officers for 1935 are:

President, T. N. Ashworth, Connersville.
Vice-President, H. W. Smelser, Connersville.
Secretary-Treasurer, R. H. Elliott, Connersville.

* * *

FLOYD COUNTY MEDICAL SOCIETY met in annual meeting at the Tavern Hotel, New Albany, December fourteenth, with twenty-eight members and a number of invited guests present. A program of musical entertainment was enjoyed. This was

the annual "ladies' night" and no scientific program was arranged. The incoming president of the state association, Dr. Walter J. Leach, was present, and responded to a request for a talk. Officers for 1935 were named as follows:

President, John P. Gentile, New Albany.
Vice-President, Harry Voyles, New Albany.
Secretary-Treasurer, P. H. Schoen, New Albany.

* * *

FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY members met at the Chamber of Commerce, Fort Wayne, December fourth, to hear Dr. Herman L. Kretschmer, Chicago, discuss "Borderline Problems in Urologic Diagnosis." Forty-eight members and four guests were present.

FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY met at the Chamber of Commerce, Fort Wayne, December eighteenth, to hear Dr. Kellogg Speed, clinical professor of orthopedic surgery of Rush Medical College, talk on "Fractures." A moving picture showing first-aid treatment of fractures of the lower extremities was presented. Medical Society officers for 1935 are:

President, L. P. Harshman, Fort Wayne.
Vice-president, H. A. Ray, Fort Wayne.
Secretary, W. W. Duemling, Fort Wayne.
Treasurer, E. L. Cartwright, Fort Wayne.

* * *

FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY members met in Attica, December sixth, to hear Dr. Edward Stahl, Lafayette, discuss "Fractures." A social time was enjoyed at the home of Dr. J. R. Burlington. Officers for 1935 are:

President, A. L. Ratcliff, Kingman.
Vice-President, A. R. Kerr, Attica.
Secretary, A. L. Spinning, Covington.

* * *

GIBSON COUNTY MEDICAL SOCIETY held a meeting at the Methodist Hospital in Princeton, December tenth, with Dr. E. V. Marchand, Haubstadt, as principal speaker, his subject being, "Etiology and Treatment of Arthritis." Attendance numbered eighteen. Installation of officers for 1935 included:

President, K. S. Strickland, Owensville.
Vice-President, Carl M. Clark, Oakland City.
Secretary-Treasurer, O. M. Graves, Princeton.

* * *

GRANT COUNTY MEDICAL SOCIETY officers for 1935 were elected at the dinner meeting held November twenty-seventh at the Hotel Spencer, Marion. Dr. Russell Lavengood presented a paper entitled "Are We Sane?" Officers are:

President, Harmon Goldthwaite, Marion.
Vice-President, H. A. Miller, Marion.
Secretary-Treasurer, E. F. Jones, Marion.

* * *

HAMILTON COUNTY MEDICAL SOCIETY held its meeting in the Hamilton County Hospital, December eleventh. This was the annual homecoming banquet and election of officers. Thirty-four physicians attended. Officers for 1935 are:

President, A. F. Connoy, Westfield.
Vice-President, R. F. Harris, Noblesville.
Secretary-Treasurer, R. E. Havens, Cicero.

* * *

HANCOCK COUNTY MEDICAL SOCIETY held its regular meeting at the Columbia Hotel, Greenfield, December seventeenth. Dr. J. B. Ellingwood presented a paper on "Care of Infants." Officers were elected for 1935.

* * *

HENDRICKS COUNTY MEDICAL SOCIETY members met at Crawley's Hall, Danville, Indiana, November twenty-third. Dr. Luther Williams discussed "Pathology of the Upper Intestinal Tract" before the twelve attending physicians. Officers for 1935 are:

President, F. Mount, Danville.
Vice-President, R. E. Jones, Clayton.
Secretary-Treasurer, W. T. Lawson, Danville.

* * *

HENRY COUNTY MEDICAL SOCIETY met at the Henry County Hospital, November twenty-second, with twenty members present. The subjects, "Elementary Diagnosis," "Syphilis of the Central Nervous System," and "Vincent's Infection of the Lung," were discussed by Drs. Charles I. Bird and Murray DeArmond, both of Indianapolis, and Dr. C. C. Bitler, of Newcastle.

* * *

HOWARD COUNTY MEDICAL SOCIETY met at Kokomo, December seventh. A social meeting was enjoyed and officers were elected as follows:

President, E. R. Clarke, Kokomo.
Vice-President, R. E. McIndoo, Kokomo.
Secretary-Treasurer, W. J. Marshall, Kokomo.

* * *

HUNTINGTON COUNTY MEDICAL SOCIETY members met for the annual organization meeting at the Hotel LaFontaine in Huntington, December fourth. Officers for 1935 were elected as follows:

President, M. B. Deems, Huntington.
Vice-President, L. W. Smith, Warren.
Secretary-Treasurer, R. D. Meiser, Huntington.

* * *

INDIANAPOLIS (MARION COUNTY) MEDICAL SOCIETY met in the afternoon of November twentieth at the medical school auditorium for a clinic on diseases of the gastro-enterologic tract, conducted by Dr. Henry L. Bockus of the postgraduate school of the University of Pennsylvania. In the evening Dr. Bockus presented an address on "Pathogenesis of Gall Stones."

November twenty-seventh the regular meeting of the society was held at the Athenaeum when papers were presented by Dr. Edgar F. Kiser on "Electrocardiography for the General Practitioner" and Dr. Chester A. Stayton on "Cancer in Indiana." The Canti film on cancer, a movie sponsored by the A. M. A. and the American Society for the Prevention of Cancer, was shown.

* * *

On December seventh the Indianapolis Medical Society held a memorial meeting for Dr. John W. Carmack and Dr. A. M. Mendenhall at the nurses' home of the Methodist Hospital.

The December fourth meeting for election of officers resulted as follows:

President, C. H. McCaskey, Indianapolis.
Vice-President, W. E. Tinney, Indianapolis.
Secretary-Treasurer, James S. McBride, Indianapolis.

* * *

JASPER-NEWTON COUNTY MEDICAL SOCIETY met with Dr. George Van Kirk, at Kentland, December fourteenth, to hear Dr. David H. Sluss, of Indianapolis, discuss "Anatomy and Treatment of Hernias." Mr. Frank Martin, insurance adjuster, gave a talk on insurance compensation. Attendance numbered twenty-one. Officers for 1935 were elected:

President, A. E. Glick, Kentland.
Vice-President, M. D. Gwin, Rensselaer.
Secretary-Treasurer, A. P. Ranier, Remington.

* * *

JAY COUNTY MEDICAL SOCIETY members heard Dr. Grover C. Penberthy of Detroit talk on "Surgery of Childhood" at the December seventh meeting held at the Portland Country Club. Officers of this society for 1935 are:

President, G. V. Cring, Portland.
Vice-President, H. J. Hiestand, Pennville.
Secretary-Treasurer, B. M. Taylor, Portland.

* * *

KNOX COUNTY MEDICAL SOCIETY held its annual dinner meeting at Vincennes, December eleventh, with Drs. Walter Leach, New Albany, president of the Indiana State Medical Association for 1935, as speaker, together with Dr. H. C. Wadsworth of Washington and Mr. Thomas A. Hendricks, executive secretary of the Indiana State Medical Association. Officers were elected as follows:

President, L. L. Gilmore, Vincennes.
Vice-President, R. G. Moore, Vincennes.
Secretary-Treasurer, Maurice Fox, Bicknell.

* * *

LAKE COUNTY MEDICAL SOCIETY members held their annual dinner meeting at Lundgren's, in Hammond, December thirteenth, with an attendance of 125. No formal program was presented, the evening being devoted to various festivities. Officers for 1935 were elected as follows:

President, James M. White, Gary.
President-elect, George M. Cook, Hammond.
Secretary-Treasurer, E. M. Shanklin, Hammond.

LAWRENCE COUNTY MEDICAL SOCIETY members met in the Greystone Hotel, Bedford, December fifth, when officers for 1935 were elected as follows: President, A. E. Newland, Bedford; vice-president, J. D. Byrns, Mitchell; secretary-treasurer, L. H. Allen, Bedford.

* * *

MADISON COUNTY MEDICAL SOCIETY met at St. John's Hospital, Anderson, November nineteenth. Dr. James F. Balch, Indianapolis, was the principal speaker, his subject being, "Everyday Urological Problems." Attendance numbered thirty.

Madison County Medical Society members met at St. Johns Hospital, Anderson, December seventeenth, with Dr. Frank F. Hutchins, Indianapolis, as principal speaker. Dr. Hutchins' subject was "Nervous Symptoms and Their Mechanisms." Attendance numbered forty. Drs. Paul Nelson, Anderson, Jack King, Anderson, and C. S. Grahame, Summitville, were elected to membership in the society. Officers for 1935 were elected as follows:

President, F. C. Guthrie, Anderson.
Vice-President, H. W. Fitzpatrick, Elwood.
Secretary-Treasurer, M. A. Austin, Anderson.

* * *

MARSHALL COUNTY MEDICAL SOCIETY met at Plymouth, December twelfth, to hear Dr. Harry Knott discuss "Some Practical Points in the Treatment of Fractures." Attendance numbered ten.

* * *

MONROE COUNTY MEDICAL SOCIETY met for its annual meeting December twelfth in Bloomington. Dr. Dillon Geiger presented an address on "Problems of Defective Hearing." Officers for 1935 were elected:

President, J. W. Wiltshire, Bloomington.
Vice-President, Melville Ross, Bloomington.
Secretary-Treasurer, Dillon Geiger, Bloomington.

* * *

MONTGOMERY COUNTY MEDICAL SOCIETY members met at the Culver Hospital, Crawfordsville, November twenty-second. Dr. G. W. Gustafson, Indianapolis, presented an illustrated discussion of "Problems in Obstetrics." Thirty-three attendants enjoyed the Thanksgiving turkey dinner.

* * *

MUNCIE ACADEMY OF MEDICINE met December fourth at the Hotel Roberts, with Dr. George J. Garceau of Indianapolis as the principal speaker, his subject being "Backache." On December eleventh the academy heard Dr. Gerald W. Gustafson of Indianapolis talk on "Some Obstetrical Problems." At this meeting the DeLee film on "Breech Presentation" was shown.

* * *

NOBLE COUNTY MEDICAL SOCIETY met at Ligonier, December fourth. Dr. L. T. Rawles, Fort Wayne, discussed "Sickness Insurance and State Medicine." Attendance numbered twenty-five. Officers for 1935 are:

President, H. A. Luckey, Wolf Lake.
Vice-President, J. B. Schutt, Ligonier.
Secretary-Treasurer, W. F. Carver, Albion.

* * *

NORTHEASTERN INDIANA ACADEMY OF MEDICINE held a "ladies' night" meeting at the Gawthrop Hotel, Kendallville, December twentieth. Dr. Victor Hilgemann, dentist, of Fort Wayne, presented moving pictures of his trip to Alaska.

* * *

ORANGE COUNTY MEDICAL SOCIETY members met at Paoli November twentieth, with Dr. Walter Leach of New Albany, president for 1935 of the Indiana State Medical Association, as principal speaker.

* * *

POSEY COUNTY MEDICAL SOCIETY members met at the Tavern Inn, New Harmony, December thirteenth, for election of officers. A fee schedule for township work was adopted.

* * *

RANDOLPH COUNTY MEDICAL SOCIETY members met at the Randolph County Hospital, Winchester, November twelfth, to hear Dr. Frank Walker, Indianapolis, talk on "Aphorisms of Gynecology." Attendance numbered fourteen. "Modern Treatment of Pediatrics" was the subject presented before the October tenth meeting of this society by Dr. Louis Segar, of Indianapolis.

The society held its annual banquet at the Randolph Hotel, Winchester, December tenth. Officers were elected as follows:

President, C. E. Martin, Lynn.
Vice-President, Leroy Chambers, Union City.
Secretary-Treasurer, L. W. Painter, Winchester.

* * *

RUSH COUNTY MEDICAL SOCIETY held its annual election of officers December eleventh. Dr. E. B. Mumford of Indianapolis presented a paper on "Injuries to the Knees." For 1935 the officers are:

President, Roy Shank, Rushville.
Vice-President, C. C. Atkins, Rushville.
Secretary-Treasurer, Frank Green, Jr., Rushville.

* * *

ST. JOSEPH COUNTY MEDICAL SOCIETY members heard Dr. Max Cutler of Chicago discuss "Treatment of Cancer by Radium and X-ray Methods; his address was illustrated with lantern slides.

The forty-ninth annual meeting of the St. Joseph County Medical Society was held November nineteenth in the Hotel Oliver, South Bend. A clinical study of special cases was conducted in the forenoon by Dr. Harry Helmen at Epworth Hospital. Luncheon was served in the hospital dining room. Speakers for the afternoon and evening sessions included Dr. N. S. Heaney, Chicago; Dr. Walter C. Alvarez, Rochester, Minn.; Dr. Carl D. Badgley, Ann Arbor, and Dr. R. G. Leland, Chicago. Election of officers at the December fourth meeting of the society resulted as follows:

President, Milo K. Miller, South Bend.
Vice-President, R. M. McDonald, Mishawaka.
Secretary-Treasurer, Martha Lyon, South Bend.
Assistant Secretary, George Rosenheimer, South Bend.

Fifty members of the St. Joseph County Medical Society heard Dr. J. L. Wilson of South Bend speak on "Cancer of the Gastro-Intestinal Tract" at a meeting held in the Oliver Hotel, December eleventh.

* * *

SHELBY COUNTY MEDICAL SOCIETY met at Shelbyville, December fifth, with eighteen physicians present. Election of officers for 1935 resulted as follows:

President, L. C. Sammons, Shelbyville.
Vice-President, M. M. Wells, Fairland.
Secretary-Treasurer, W. R. Tindall, Shelbyville.

* * *

SULLIVAN COUNTY MEDICAL SOCIETY met at the Mary Sherman Hospital, Sullivan, December fifth. Dr. O. O. Alexander, Terre Haute, was the principal speaker, his subject being, "Cholecystitis and Cholecystectomy." Attendance numbered fifteen. Officers for 1935 were elected as follows:

President, J. S. Brown, Carlisle.
Vice-President, Harvey Crowder, Sullivan.
Secretary-Treasurer, M. H. Bedwell, Sullivan.

* * *

TIPPECANOE COUNTY MEDICAL SOCIETY members met at Lincoln Lodge, December thirteenth, for a business and social meeting, with forty physicians present. A discussion of sickness insurance composed the program.

Officers for 1935 include:

President, George R. Clayton, Lafayette.
Vice-President, M. G. Frasch, Lafayette.
Secretary, J. C. Burkle, Lafayette.
Treasurer, Charles Hupe, Lafayette.

* * *

VANDERBURGH COUNTY MEDICAL SOCIETY officers for 1935 are:

President, Paul D. Crimm, South Bend.
Vice-President, R. R. Acre, South Bend.
Secretary-Treasurer, Charles Willis, South Bend.

* * *

VIGO COUNTY MEDICAL SOCIETY members met at the Union Hospital, Terre Haute, December eleventh, to elect officers for 1935. For the scientific program, interesting cases were reported by Dr. O. O. Alexander, Dr. R. G. Harkness, and

Dr. H. R. Vandivier. Forty physicians were present. Officers for 1935 are:

President, E. C. McBride, Terre Haute.
Vice-President, L. G. Malone, Terre Haute.
Secretary-Treasurer, A. M. Mitchell, Terre Haute.

* * *

WABASH COUNTY MEDICAL SOCIETY held a meeting at Wabash December fifth for election of officers. For 1935 officers will be as follows:

President, Gordon Kidd, Roann.
Vice-President, M. F. Jordan, Wabash.
Secretary-Treasurer, R. M. LaSalle, Wabash.

* * *

WAYNE-UNION COUNTY MEDICAL SOCIETY members met with the Indiana Academy of Ophthalmology and Otolaryngology at the Richmond-Leland Hotel December twelfth for an all-day session. Speakers at the morning session were Dr. J. K. Leasure (president of the academy), Indianapolis; Dr. C. P. Clark, Indianapolis; Dr. B. N. Lingeman, Crawfordsville; Dr. Carroll O'Rourke, Fort Wayne; Dr. R. S. Chappell, Indianapolis, and Dr. F. J. Spillman, Connersville. A round-table discussion at noontime was conducted by Dr. C. E. Gillespie and in the afternoon speakers included Dr. W. F. Clevenger, Indianapolis; Dr. F. McK. Ruby, Union City; Luther C. Peter, Philadelphia; C. H. McCaskey and H. A. Van Osdol, Indianapolis, and Eugene L. Bulson, Fort Wayne. Following the evening banquet Dr. Luther C. Peter of Philadelphia presented an address on "Ocular Relation of Sinus Disease." The Wayne-Union County society held its annual election of officers December twentieth, when the meeting was held at the Reid Hospital.

* * *

WHITLEY COUNTY MEDICAL SOCIETY officers for 1935 are:

President, W. E. Wilkin, South Whitley.
Vice-President, L. W. Tennant, Larwill.
Secretary-Treasurer, Paul Garber, South Whitley.

Commercial Announcements

ASSISTANCE TO MEDICAL WRITERS. Research, Abstracts, Translations (all European languages). Papers prepared. All work done personally. Ten years' medical literary experience with institutions and leading journals. Florence Annan Carpenter, 413 St. James Place, Chicago, Illinois.

FOR THE HARD OF HEARING. Special lip-reading courses for adults and for children. Private instruction. Interview by appointment. Local medical references. Mrs. Henry C. Ketcham, 5139 Kenwood Avenue, Indianapolis, Ind. Telephone, Humboldt 3090.

FOR SALE. A system of Tice, just like new; paid $115; will sell for $75, including a full year of *Medical Digest* for 1934. Reason for wishing to dispose of system is that physician is specializing and does not wish to keep the complete system. Write to Box C-12, THE JOURNAL, 1021 Hume Mansur Building, Indianapolis.

LOCATION WANTED. Interested in location for private practice, or an association with a physician. Particularly interested in internal medicine, pediatrics, and obstetrics. 1930 graduate. Best of references. Address Box S-1, c/o THE JOURNAL, 1021 Hume Mansur Building, Indianapolis, Indiana.

Trademark Registered **STORM** Trademark Registered

Binder and Abdominal Supporter



Gives perfect uplift. Is worn with comfort and satisfaction. Made of Cotton, Linen or Silk. Washable as underwear. Three distinct types, many variations of each.

The Picture Shows "Type N"

Storm belts adaptable to all conditions, Ptosis, Hernia, Pregnancy, Obesity, Sacro-Iliac Relaxations, High and Low Operations, etc.

Ask for Literature

KATHERINE L. STORM, M. D.
Originator, Owner and Maker
1701 Diamond St. Philadelphia

NOW your patients can wear rimless glasses *without screws to come loose.

●Just specify "LOXIT" on your optical prescriptions. This new Bausch & Lomb improvement available through the

WHITE-HAINES OPTICAL CO.
HUME MANSUR BUILDING ● INDIANAPOLIS

*the "trouble points" of rimless glasses joined by screws strengthened by "LOXIT" screwless construction



THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

OFFICE OF PUBLICATION: 1021 Hume Mansur Bldg., INDIANAPOLIS, INDIANA

VOLUME 28 FEBRUARY, 1935 NUMBER 2

ORIGINAL ARTICLES

ERYTHROBLASTIC ANEMIA*†

ROBERT A. STRONG, M. D.

NEW ORLEANS, LA.

Nine years ago Cooley[1] reported five cases of anemia in children, which presented many features similar to those described in the anemia known up to that time as von Jaksch's.[2] This raised the question as to whether or not von Jaksch's "anemia pseudoleukemica infantum" was entitled to retain a place in medical nomenclature as a definite clinical entity. In a later paper, Cooley, Witwer, and Lee[3] added two cases to the original five. In all of the children the condition was similar to that of von Jaksch's anemia in that they began in infancy with a moderate anemia, pronounced splenomegaly, leukocytosis of varying degree, many normoblasts and normal or increased fragility to salt solutions. Reticulated cells were not always studied, but when looked for were found markedly increased. In all, the disease was essentially chronic and in most of the cases there was no apparent reason for the grave secondary anemia.



ROBERT A. STRONG

Since Cooley's first report, Hitzrot[4] has reported three cases; Whipple, Reeves, and Cobb[5], two cases; Wollstein and Kreidel[6], nine cases; Baty, Blackfan, and Diamond,[7] twenty cases; and Crawford and Williamson[8] have recently reported another case. In addition to these, Vogt and Diamond[9], and Feingold and Case[10] have described the roentgenologic appearance of the bones.

So far, it may be definitely stated that while each report has added information which has been helpful in understanding and identifying this particular type of infantile anemia, no one has been able to discover its true cause. At the time that Cooley first described this anemia and utilized more modern hematologic methods to study the cases, he realized a condition which probably continues to exist. We did not formerly possess a clear-cut classification of anemias in early life, and as a result many cases encountered were improperly diagnosed. Many of these early anemias were reported as von Jaksch's anemia because they did not fit readily into any other existing classification. It, therefore, was considered that they might as well be grouped under the name proposed by von Jaksch.

It should be remembered that von Jaksch's original description was written nearly fifty years ago, when facilities available at the present time for studying hematology as well as bone changes did not exist. His main points were the appearance of the anemia in infancy and early childhood; the strikingly large, hard spleen; some hepatic swelling; a high leukocytosis, sometimes above 100,000; and pronounced changes in size and shape of the red cells, with varying degrees of anemia of a chlorotic type. He did not emphasize, as Cooley[11] reminds us, the occurrence of nucleated erythrocytes, nor did he lay as much stress as some subsequent writers have on the appearance of white cells of the marrow series. Moreover, Cooley believes that von Jaksch greatly clouded the whole question by speaking of a pronounced tendency to recovery. For this reason he thinks that many ordinary secondary anemias were classified under his name.

In the anemia under discussion here, which has been described satisfactorily by the name of erythroblastic anemia, several outstanding features seem to be present in every case reported since Cooley's first description.

The children have a characteristic appearance. They usually resemble the Mongolian race. There

* Presented before the General Meeting of the Indiana State Medical Association, Indianapolis session, October 10, 1934.

† From the Department of Pediatrics, School of Medicine, Tulane University of Louisiana, New Orleans, Louisiana.



Figure 1

are several reasons for this. There is a peculiar yellow, muddy discoloration of the skin, with a thickening of the cranial bones and the malar eminences. This thickening is more pronounced as the disease progresses. When a case is once seen, the appearance makes such a profound impression on the observer that it should be recognized easily whenever it is again encountered.

The next most consistently regular changes are in the bones, and these are promptly recognized as being peculiar to this form of anemia when roentgenograms are made. Later, however, Cooley[12] found that Gansslen, in describing a large group of patients with familial hemolytic icterus, described skull changes which may be similar to those described in the erythroblastic anemia of Cooley. The description was not clear, however, so no definite conclusions could be reached. Others have mentioned large heads in hemolytic icterus, and there are some changes reported in sickle-cell anemia, which is generally believed to be a form of hemolytic icterus.

The bone changes are perhaps better illustrated than described. For that reason illustrations from a recent case available to us are shown in the several figures.

In referring to Figure 1, it will be noted that the skull shows a marked thickening and a peculiar halo resembling the growth of hair. In one of Cooley's cases which came to autopsy, it is stated that the unusual thickness of the skull was very impressive, but in spite of the increased thickness, the bone was easily sawed. The convex surface of the parietal bones had a stippled appearance like that of pigmented skin, and the opinion was expressed that the yellow cancellated bone was seen through the other layers of the compact bone.

In Figure 2, the peculiar mottled or "mosaic" appearance of the bone is striking. This is shown also in Figure 3, of the pelvis. In Figure 4, the decreased density, amounting almost to transparency of the fibula and tibia, is one of the characteristic changes noted in this type of anemia. The transverse lines of increased density are also unique.

The explanation which has been offered for these changes in the bones, is that they are the result of the reaction of the marrow to prolonged overstimulation as a consequence of a chronic hemolysis beginning before the cortex is too firm to permit the overgrowth of marrow. In earlier stages and in less severe cases, the porous appearance in the roentgenograms seems to represent marrow hyperplasia, while in the terminal stages, the pronounced striation indicates replacement of exhausted marrow, but new bone has been found at the autopsies. That the bone change is not primary was shown in one of Cooley's cases. This patient had only slight changes when first seen, although the splenic enlargement was already marked. Cooley and his associates have with the roentgen



Figure 2

ray studied the skulls and long bones of many cases of nonhemolytic anemias and of rickets and syphilis, and have found no sign of any similar change. The conclusion that these particular bone changes are characteristic of the hemolytic anemias in general, and of erythroblastic anemia of Cooley in particular, seems to be adequately justified.

The next feature of this form of anemia is the facial appearance, which is shown in Figure V. This child has a slight Mongoloid appearance, but the color of her skin and the gross appearance of the skull, as well as the prominent malar bones are features which coincide most typically with Cooley's first description of the anemia. The color of her skin presents the muddy, yellowish discoloration which is constant in this form of anemia. It is believed to be caused by a continuation of the hemolysis as well as a certain amount of jaundice. For this reason both the van den Bergh test and the icterus index have been utilized for the purpose of determining the degree of hemolysis and jaundice. The results, however, in the collected cases have been too variable to be of value in reaching any conclusion.

Most of the cases seen have been either in Italians or in children of parents from the Mediterranean countries. This has by no means been constant, however, because cases have been reported in English children and in children with Negro blood. Again the cases reported are insufficient to determine whether or not this form of anemia is peculiar to any particular section of the world or nationality.

Finally, the feature of this disease which has excited the greatest amount of interest is the blood picture. The main points may be summarized by saying that evidence of bone marrow stimulation, characterized by the great number of immature forms, a constant leukocytosis, and the absence of increased fragility, seems to be outstanding. The hemoglobin in every case has usually been around thirty to forty. The red cells are considerably reduced as well. There is usually a leukocytosis of 20,000 or more, but the differential count is not especially remarkable. The cells vary greatly in size and shape, and there are usually a considerable poikilocytosis and anisocytosis. There is a very marked and early bone marrow irritation which is reflected in the production of the increased number of leukocytes. As the development of the marked bone hyperplasia increases, these numbers may run to a high figure. In erythroblastic anemia, fragility of the erythrocytes to hypotonic salt solutions is conspicuous by its absence. It is for this reason that this particular form of anemia is not considered to be a true hemolytic jaundice, which invariably shows an increase in fragility of erythrocytes to salt solutions.

It has been found that in no other blood disease is there



Figure 4



Figure 3

a greater number of erythroblasts than is seen in erythroblastic anemia. Moreover, after a splenectomy their number increases remarkably. In the various counts which have been made, the normoblasts, or the youngest form, seem to predominate, although microblasts and macroblasts form a large part of these nucleated cells.



A B

Figure 5

In comparing the effects of splenectomy in erythroblastic anemia, hemolytic jaundice and sickle-cell anemia, Cooley[11] invites attention to the fact that in hemolytic jaundice, with the exception of rare cases of the pernicious type, the result is usually, if not always, a complete cure. Hemolysis usually stops or is greatly diminished, the anemia or jaundice disappears, and the patient, to all intents, is well.

In sickle-cell anemia after splenectomy, the normoblasts often disappear, although they are present in considerable numbers before the operation. The patient appears improved, although the anemia is well-pronounced and there is little change in the hemolysis, and the characteristic sickle cells continue.

In erythroblastic anemia, splenectomy is followed by a remarkable increase of erythroblasts in the blood, but so far as available results are concerned, there seems to be little definite improvement in the patient. Hemolysis and jaundice may be temporarily lessened, but the disease process continues as before. The benefit to the patient lies mostly in the removal of the drag of the heavy spleen.

In the particular case illustrated here, a splenectomy was done when the child was twenty months old, and although the child is now nine years old, there is no change in the blood picture, the color of the skin, or the bone pathology. Until we know more concerning the function of the spleen and its relation to blood formation and destruction, our results from splenectomy will be inconclusive. It seems to be involved chiefly in the mechanism of blood destruction, but the indications are that in erythroblastic anemia, when it is removed, hemolysis may be continued by other parts of the reticulo-endothelial system. Until this is discovered, the true underlying cause of erythroblastic anemia will be imperfectly understood.

It, however, offers a fascinating opportunity for study because it has taxed and challenged the ingenuity of clinicians and hematologists alike.

REFERENCES

[1] Cooley, T. B., and Lee, Pearl: *Tr. Am. Pediat. Soc.*, 1925.
[2] von Jaksch, R.: *Wein. klin. Wchnschr.*, 2:435, 1889.
[3] Cooley, T. B., Witwer, E. R. and Lee, Pearl: *Am. J. Dis. Child.*, 34:347-363 (September) 1927.
[4] Hitzrot, J. M.: *Ann. Surg.*, 88:361-379 (September), 1928.
[5] Whipple, A. O., Reeves, R. J., and Cobb, C. C.: *Ann. Surg.*, 88:380-387 (September), 1928.
[6] Wollstein, M. and Kreidel, K. V.: *Am. J. Dis. Child.*, 39: 115-130 (January), 1930.
[7] Baty, J. M., Blackfan, K. D., and Diamond, L. K.: *Am. J. Dis. Child.*, 43:667-704 (March), 1932.
[8] Crawford, Rena and Williamson, G. R.: *Am. J. Dis. Child.*, 46:565-571 (September), 1933.
[9] Vogt, E. C., and Diamond, L. K.: *Am. J. Roentgenol.*, 23:625-630 (June), 1930.
[10] Feingold, Benjamin F. and Case, James T.: *Am. J. Roentgenol.*, 29:194-202 (February), 1934.
[11] Cooley, T. B.: *Am. J. Dis. Child.*, 33:786-797 (May), 1927.
[12] Cooley, T. B.: *Am. J. Dis. Child.*, 36:1257-1262 (December), 1928.

THE DIAGNOSIS AND TREATMENT OF THYROID STATES*

FRANK H. LAHEY, M. D.
BOSTON, MASSACHUSETTS

We have made it a custom, when talking about a subject, to state first the amount of experience which we have had in that subject, in order that the audience may know whether or not we have had opportunity to make all the mistakes, and to acquire standards and develop procedures to overcome those mistakes.



FRANK H. LAHEY

We have operated on more than thirteen thousand goitres, and of that number about seventy-six per cent have been toxic, so it will be a conservative estimate to say that eight thousand were toxic.

We realize that hyperthyroidism in children is often a serious state. Children react to any intoxication very seriously, and therefore one can be over-impressed with the seriousness of hyperthyroidism in children. We have operated a large number of children and would like to say that the operation for exophthalmic goitre in children is for the most part the same problem as in the adult. There is, however, something about children which everyone should realize, and that is that we have with hyperthyroidism only the reaction of the individual to the toxicity upon which to estimate the danger. When you are dealing with an adult you depend a great deal on the weight loss

* Presented before the general meeting of the annual session of the Indiana State Medical Association at Indianapolis, October 11, 1934.

and the tachycardia, but in the child you have a tremendous tachycardia and it is impossible to separate what is the excessive reaction of childhood and what is the reaction of the disease. Therefore, we always urge that, to be on the safe side with children, the operation be done in two stages. That makes the operation safe and lowers the mortality. We, therefore, feel that in exophthalmic goitre in children the indications for surgery are the same as in the adult. The results are just as good. The mortality is a little higher, but not materially so; it is well under one per cent. There is one thing that must be borne in mind by the surgeon who operates on children for exophthalmic goitre, and that is that the effect of myxoedema in the child is more serious than in the adult. Thyroid extract is almost a complete substitute for thyroid secretion in the adult, but that probably is not true of the child; therefore, it is important in operating on children for exophthalmic goitre that the surgeon leave a larger remnant of the thyroid gland than in the adult.

There is one group of cases which we think is not appreciated by the general practitioner. He may see three or four in sequence, or he may never see one, while we who are dealing with thyroid states in large numbers are constantly dealing with this situation. It is a situation the immediate management of which settles whether the patient lives or dies; that is the so-called thyroid crisis. In acute hyperthyroidism the patient consumes himself. There will be increased metabolism, increased combustion, and finally comes the terminal stage, characterized by high temperature, excessive perspiration, diarrhoea, nausea and vomiting, and then death. The thyroid crisis, we have often said, is not unlike the diabetic crisis or diabetic coma. (We have had the opportunity to be taught this diabetic situation by Dr. Joslin.) If you wait until the patient goes into coma you are in trouble. If you can recognize the onset of the diabetic coma you can keep the patient out of it, and thus mortality is kept lower. The same is true of thyroid crisis. If you let the patients with hyperthyroidism go on until there is diarrhoea and vomiting, the majority of them will die in spite of all you can do. On the other hand, if you recognize the onset early and institute emergency measures, you can keep these patients out of the crisis and in two or three weeks you can do a subtotal hemithyroidectomy, permanently check the progress of the disease and put aside any danger of this fatal crisis. Therefore, it is important to bear in mind what in severe hyperthyroidism are the indications of the onset of thyroid crises and what are the causes which precipitate thyroid crises.

The outstanding thing that will precipitate thyroid crisis is loss of fluids or fuel. Today, on seeing a patient here in Indianapolis with extreme hyperthyroidism, the first question I asked was, "Do you eat much?" The answer was, "I cannot get enough." That is the spontaneous reaction of the body against the increased metabolism and combustion. We must realize that anything that interferes with the fluid or fuel intake of these patients with hyperthyroidism increases the liability of crisis. Therefore, if you have vomiting, that patient is a candidate for crisis; if there is diarrhoea, that patient is a candidate for crisis, because there is loss of fluid and fuel—the body cannot keep in step with the metabolic hyperactivity.

Hyperthyroidism parallels diabetes in relation to infection. Just as infection increases the danger of diabetes, so it increases the danger of hyperthyroidism. We have seen a patient with moderate hyperthyroidism, with a pulse of 130-140, converted into thyroid crisis by an alveolar abscess. We have seen an acute appendicitis in such a patient bring about an immediate fatality from hyperthyroidism. Therefore, any superimposed infection makes that patient a candidate for a thyroid crisis. We know that thyroid crisis may occur with no apparent cause, but if any such patient shows any signs of unexplained irrationality, that patient is a candidate for crisis. Therefore, if you have any of these indications in a patient with hyperthyroidism, an impending crisis is a possibility, so take off your coat as you would with a threatened diabetic coma, and go to work. If you do the right thing, if you keep him out of crisis, you can get him well enough so that he will stand surgery. How? By supplying him with fluid and fuel by an indwelling cannula in his vein, preferably the long saphenous vein above the ankle, because these patients are restless, and so you should not use an arm vein. Tie the cannula into the vein, using a Hendon needle, and let it run day and night from four days to a week, keeping up a steady intravenous drip, the patient receiving forty to sixty drops every minute, and in twenty-four hours receiving five to six hundred grams of glucose, thus supplying him with something to burn instead of burning himself. If you undertake the treatment of this crisis before eliminating the diarrhoea and vomiting, if the crisis is not overcome, you cannot do him any good and he will die. But having brought him out of the crisis, having protected him, from the onset, against this combustion, the diarrhoea being controlled and with vomiting also controlled, then for three weeks give him large amounts of fluid and a high carbohydrate diet, and at the end of three weeks he can be subjected to a right thyroidectomy, sent home for three weeks, brought back and subjected to a left thyroidectomy, and he will then be permanently relieved. If you get a patient out of impending crisis and send him home unoperated, many times he will go back into crisis and you cannot get him out again.

APATHETIC HYPERTHYROIDISM

We wish to present to you another type of thyroid disease that is not commonly appreciated. We have written of this type of hyperthyroidism under

the term apathetic hyperthyroidism. There has been some criticism of this term, and I am not speaking resentfully; criticism is good for all of us. There has been the criticism that we have made with this another hyperthyroidism group, but we have no such purpose. We have called this apathetic hyperthyroidism purely to distinguish it, to label it, and to attract attention to it. It is not another group; it is the same disease as activated hyperthyroidism, but it is the reaction in elderly individuals to hyperthyroidism as compared with young individuals. This stage is characterized by unappreciated features. It is often not diagnosed and the seriousness often not appreciated.

Typical thyroid disease is characterized by exophthalmos, and hot, moist skin; contrast it with the so-called apathetic hyperthyroidism. As stated, this is the same disease. The young individual will have large active muscles, while the elderly individual does not have the musculature with which to make heat. These latter patients often are undiagnosed because they lack the striking features which characterize the picture of the typical exophthalmic goitre with which we are familiar. Therefore, we should bear in mind these features: apathetic hyperthyroidism usually occurs in patients over fifty; there are usually no eye signs, not even a stare; the gland is not enlarged but is firm in character. In activated hyperthyroidism the skin is somewhat moist and flushed, due to the excessive heat production; in apathetic hyperthyroidism the skin is cool, pigmented and wrinkled; in activated hyperthyroidism, if you place the palm of your hand over the apex you find a forceful, thrusting, pounding beat disseminated over the entire precordium; if you place your hand over the apex of the apathetic hyperthyroidism patient you find no such striking situation. In activated hyperthyroidism the basal metabolism usually is high; in apathetic hyperthyroidism it is elevated, but usually only moderately so. The pulse rate in activated hyperthyroidism is apt to be 130-160; in apathetic hyperthyroidism it is only moderately, but persistently, elevated. The outstanding features in apathetic hyperthyroidism are myasthenia and weight loss. Elderly patients with marked, unexplained myasthenia, with moderate but persistent tachycardia, with unexplained weight loss over a long period of time, should be suspected always as possibly having apathetic hyperthyroidism.

Are they the same disease? Yes; but they are different in reaction. If you do too much surgery on a patient with activated hyperthyroidism, she will die in excitation and with a high pulse; if you do too much surgery on a case of apathetic hyperthyroidism, she will die unexcited, sinking gradually into coma with a cool skin, and will impress you as being an entirely different problem.

These cases are important from two points of view. First, because while they do not possess the striking evidences of hyperthyroidism and are often not diagnosed, they can be relieved by surgery just as well as the activated cases; and second, because in our hands they have produced almost all the mortality from thyroid surgery. This is the type of patient in whom (since they do not display the warning signs, having a pulse around 120 with a skin that is cool) we think we can do a complete subtotal thyroidectomy in one operation, only to get a fatality. Our experience has been that it is best to divide the operation in all patients with apathetic hyperthyroidism into two stages. We have in these cases three outstanding fatality factors. They are:

1. Be careful of thyroid surgery in a patient over fifty years of age;
2. Be careful of thyroid surgery in a patient who has lost fifty pounds or over in weight;
3. Be careful of thyroid surgery in a patient who has had the condition over a year.

These are the patients in whom fatalities occur. We would strongly urge, therefore, to have this type of patient in mind and be careful to investigate them for apathetic hyperthyroidism—those patients with a moderate, persistent tachycardia, with unexplained myasthenia, and with unexplained loss of weight over a long period of time. The results from surgery are just as good as in active hyperthyroidism. They regain weight, the myasthenia is relieved, they lose the pigmentation of the skin, and give excellent results.

HYPERTHYROIDISM AND DIABETES

We would like now to say a few words regarding hyperthyroidism and diabetes. First, we would like to say that if you do not agree with the surgeons regarding the surgical treatment of hyperthyroidism, that is all right. You are quite welcome to treat your patients with hyperthyroidism by x-ray, radium, or anything you choose. But do not do that with patients who have hyperthyroidism and diabetes, because hyperthyroidism has a similar effect on diabetes as does infection. It accentuates the diabetes and increases the danger of the disease.

Dr. Joslin and I reported a group of cases at the last meeting of the American Surgical Association in Toronto, showing an old series of diabetics with exophthalmic goitre and a new series. In the first series up to 1928, there was a mortality of 2.7 per cent; in the latter series up to 1934, none. On the other hand, in those with secondary hyperthyroidism, that is toxic adenoma and diabetes, the mortality was 7 per cent in the first series and in the last series, up to 1934, it was 3.9 per cent. The mortality in a large series of cases of uncomplicated exophthalmic goitre has been about 0.5 per cent. Therefore, we can see that the risk of diabetes with hyperthyroidism is greater than the risk with hyperthyroidism alone.

There are certain features of diabetes and hyperthyroidism that should be realized. First, there is a high blood-sugar in patients with hyperthy-

roidism which is often mistaken for diabetes. We must, in order to rule out making a false diagnosis of diabetes in hyperthyroidism, elevate the blood sugar a little bit. Otherwise, as Dr. Joslin has said, you may make a diagnosis of diabetes when it does not exist. The glycosuria within these limits will clear up as soon as the hyperthyroidism is relieved, and you can likewise depend upon this, that true diabetes will be relieved when the hyperthyroidism is relieved. You can depend upon this in addition, that if you relieve the diabetic of his hyperthyroidism, you increase the carbohydrate tolerance and materially diminish the demand for insulin. We would, therefore, urge, from our experience with hyperthyroidism in the diabetic, that you do not argue or debate whether to operate for the hyperthyroidism. Be sure he has true diabetes, then operate to relieve the hyperthyroidism, thereby making the diabetes much easier and more satisfactory to manage. You cannot expect any cure, however, of the diabetes following the relief of hyperthyroidism.

EXOPHTHALMOS

I am anxious to present another complication which illustrates a most distressing situation, and that is exophthalmos. I feel sure that many family physicians do not realize the danger of exophthalmos. It should be realized that there are two types of exophthalmos associated with thyroid states. Exophthalmos comes with excessive thyroid states, and it comes also at times with postoperative myxoedema. The worst type of exophthalmos is the type associated with postoperative myxoedema. A terrible catastrophe occurs if hyperthyroidism with excessive exophthalmos is permitted to go on to the degree that there is excessive lid pressure and conjunctival oedema. This requires at times enucleation of both eyes. We have seen six eyes lost from this, and we would strongly urge that in dealing with exophthalmos and hyperthyroidism you remember that any patient with marked exophthalmos can become blind if you do not take the exophthalmos very seriously. If a patient with exophthalmic goitre gets a foreign body in his eye it causes oedema, increased lid pressure, infection, and finally slough. Therefore, I urge that these patients with excessive exophthalmos and lid pressure have two things done: First, sew the lids together; and second, operate on the thyroid immediately. Sew the lids together after denuding the lid edges; it does not do any good otherwise. What you want to do in this emergency is to overcome the lid pressure. If after sewing the lids together and doing a subtotal thyroidectomy you have not relieved the exophthalmos, turn him over to a brain surgeon to do the Naffziger operation. But I would urge that these patients with excessive exophthalmos have their eyes treated with great respect. The thyroid surgeon should realize that the exophthalmic eyes must be protected during operation. Many of them are given preoperative drugging and are semi-conscious when going to the operating room. It is easy for them to drag the sleeve of their night gown across their prominent eyes and erode the cornea. The conjunctiva has no blood vessels. It is nourished by osmosis, and if there is ulceration, infection, and oedema, it is easy for the patient to lose the eye.

Another type of exophthalmos which I am sure is not appreciated, except by those who have had to deal with it, is in the patient who has had an exophthalmic goitre operated on but has a postoperative myxoedema. The metabolic rate in such a case, in our experience, was –25. His eyes were not prominent before operation, but afterwards he had oedema of the lids, oedema over the forehead, prominent eyes, and a wrinkled conjunctiva due to lid pressure. There is a peculiar situation here. There is something which will cause an unexplained exophthalmos in the presence of myxoedema. It is probably due to a factor in the anterior portion of the pituitary gland. This condition is best treated by the Naffziger operation, in which a bone flap is turned down over each frontotemporal region. The frontal lobes of the brain are lifted up and the roof of the orbit is taken away with rongeurs, making thus greater room for the eyes and causing the exophthalmos to recede. Had we had this operative procedure six years ago we would not have lost the six eyes of which I spoke. Naffziger has shown that in most of these cases the prominence of the eye is due to an infiltration of the ocular muscles so that they will not fit into the orbital cavity, and if you enlarge the cavity the exophthalmos is overcome. Again we would urge that in these cases great care be taken to be sure that increased lid pressure does not occur, that the patient does not get a wrinkled conjunctiva and lose the eye.

HYPERTENSION

One hears a great deal about the effect of hyperthyroidism on blood pressure, and so we were interested to get the actual figures as to whether or not hyperthyroidism produced hypertension, and whether relief of the hyperthyroidism would relieve the hypertension. We have always thought that it is as important to know what we cannot accomplish by thyroid surgery as what we can. We know that hyperthyroidism does not play a part in hypertension; that the patients who have hyperthyroidism and hypertension are not relieved of the hypertension when the hyperthyroidism is relieved.

We studied the blood pressure in one hundred cases of exophthalmic goitre in which the cases were grouped by decades. The gradual trend of this group as they pass fifty and sixty is for the blood pressure to be higher, but when they are charted before and after operation there is no impressive change in the hypertension.

We have charted 225 cases of exophthalmic goitre

as relates to their blood pressures which were done in two stages, and these would, therefore, be the serious cases. When these are charted in decades, there is in a graphic chart a higher diastolic and systolic pressure with those patients who are advanced in years, but in all of the cases when charted by a graph before and after operation, there is a slight diminution in pulse pressure but no change whatever in the hypertension. It is, therefore, our conviction that hyperthyroidism does not produce hypertension, and relief of hyperthyroidism does not produce any effect upon the hypertension.

We have heard a great deal about total thyroidectomy for heart disease and for angina, and we are particularly interested in making clear to you what the situation is in connection with total thyroidectomy for heart disease, and subtotal thyroidectomy for the so-called thyrocardiac which we have described. I would like to demonstrate that these are two entirely different situations.

Consider the typical patient with hyperthyroidism plus cardiac decompensation. She has an engorged neck, enlarged liver, general anasarca; she cannot lie down; she has cardiac decompensation which cannot be restored by rest or medication. Therefore, she is a true thyrocardiac. The mortality rate in a large number of these cases operated on, even in this condition, is but 4.25 per cent. We have operated on 312 cases and they have sometimes had such bad decompensation that they had to be tapped, and yet the mortality is only 4.25 per cent. Furthermore, but few of these patients are permanently incapacitated after they are relieved of their hyperthyroidism. Why is this true and how does this situation differ from total thyroidectomy in a patient with heart disease? We have patients with cardiac decompensation and hyperthyroidism come to us in Boston from other cities to have us settle whether or not they will stand thyroid surgery. Any patient with hyperthyroidism and cardiac decompensation who can live that long will stand surgery. If there is no cardiac reserve they promptly die, and if they do not promptly die while the medical man properly makes up his mind whether or not surgery can be done—or while they are making up their minds to come into the clinic or go to another doctor—any patient who can live that long has considerable cardiac reserve. On the other hand, in my opinion, a great number of those patients on whom we do total thyroidectomy will have a return of their cardiac decompensation, since they have little or no cardiac reserve and the total thyroidectomy will relieve them but a short time. This is not true of a total thyroidectomy for angina. Total thyroidectomy will, in our opinion and from our experience, have its greatest value in a patient suffering from angina.

What is a thyrocardiac? It is a hyperthyroidism with auricular fibrillation; it is hyperthyroidism with cardiac failure. What are the end results? Out of this whole group of thyrocardiacs, 208 have been followed from two to ten years and only three cases are permanently incapacitated. The remainder have regained and kept their compensation. This proves that those patients were segregated by nature into those with large cardiac reserves before coming to us. Therefore, we would strongly urge that every doctor dealing with a patient who has cardiac decompensation and superimposed hyperthyroidism, no matter how sick the patient may seem, submit that patient to surgery, and most of them will come through, will regain their compensation, and remain well over a long period of time.

There is another group to which we would like to call your attention, those with failing hearts in myxoedema. A patient who had cardiac decompensation, fluid in the pericardium, and myxoedema, completely regained his compensation, solely by the administration of thyroid extract and disappearance of his myxoedema. There are two or three things about myxoedema and heart disease that we would like to mention. I would like to go back and speak about the patient with auricular fibrillation. In any patient with an unexplained auricular fibrillation you should look for hyperthyroidism because it is the most common cause of unexplained auricular fibrillation.

One other point we would like to speak of is the employment of quinidin preoperatively. Do not give it to your patients with hyperthyroidism before they are operated on. Why? First, because they do not tolerate it well and, second, because if you give it to a patient with auricular fibrillation before operation, get him back into normal rhythm, and then operate upon him for his hyperthyroidism, he will again go into abnormal rhythm because of his postoperative reaction. Give him digitalis preoperatively and five days after operation; when he is over his postoperative thyroid reaction, give him quinidin. When his rhythm is then restored it will stay so.

If you have a patient with myxoedema and angina pectoris, do not give him thyroid extract if he is up and about, and never in large doses. We are sure we have produced fatalities in that way. Start with small doses, with the patient in bed, stopping if there are any signs of angina.

I will mention one more subject—the value of blood cholesterol tests. Dr. L. M. Hurxthal, from our clinic, has published a series of articles regarding this test in thyroid disease in the *Archives of Internal Medicine* which are of great value. Blood cholesterol is a tricky test. The test requires great accuracy. The disadvantage is that there is a great variation, 125 to 200 milligrams, in the normals. In hyperthyroidism the blood cholesterol is low, and in myxoedema it is high. It is of little clinical value in hyperthyroidism, but in myxoedema it is quite striking and dependable. If patients have a true myxoedema and will be benefited by thyroid extract, they have a high blood choles-

terol, and as they are benefited by the thyroid extract the blood cholesterol will go down and there will be a drop in metabolism. Blood cholesterol is of more value as an index to myxoedema than the basal metabolism; it is less suspectible to emotional complications and laboratory errors.

Of what value is this? Rarely do you see a patient with a basal metabolism of –25 or more in which you cannot make a clinical diagnosis of myxoedema; but between –25 and 0 is a large number of cases to whom you do not know whether or not to give thyroid extract. This test will separate these cases. In patients with a minus metabolism who will be benefited by thyroid extract there will be an elevation of the blood cholesterol. We have checked this in obesity, in pituitary adenomas, in nephritics. In these cases, even though there be a minus metabolism, the blood cholesterol is normal. When, however, they have complete or incomplete myxoedema, the blood cholesterol is elevated. This is a particularly valuable test in those patients, and there are a number who have myxoedema but do not have the typical features and clinical appearance of that disease.

605 Commonwealth Ave.

THE NEWBORN INFANT*

ITS HAZARDS AND CARE

FOSTER J. HUDSON, M. D.
INDIANAPOLIS

The above title probably suggests a pediatric rather than an obstetric problem, but it necessarily becomes the duty of the physician conducting the delivery to recognize and immediately to treat the offspring which may be depressed, injured, or diseased.

The problem of reducing our high rate of stillbirths is receiving much well deserved attention in both medical and lay publications, but for this short period we shall consider the infant only within its first twenty-four hours of extra-uterine life.

Liebmann has emphasized the fact that the mortality of the newborn is greatest (fifty per cent) on the first day of life, the death rate decreasing gradually to one per cent on the tenth day. The chief cause of death is asphyxia or cerebral hemorrhage, the next most frequent cause, immaturity or underdevelopment, while a third and much smaller group comprises congenital conditions and melena neonatorum.

With most of us, the immediate care of the normally delivered, full term infant is a fairly well standardized procedure, namely, clearance of the upper respiratory passages of mucus, fluid or blood, by stripping the throat and nose while the head is allowed to hang downward; wiping out the mouth with soft gauze and using a tracheal or ordinary catheter to clear the larynx and upper bronchi if deemed necessary. Simultaneously with these procedures, we are able to note the general muscle tone, color of the skin, and the rate and quality of the heart tones elicited, if present, by light palpation over the precordium. The cord is clamped or tied, and the body protected from chilling by a towel or blanket.

However, even after what was considered a normal labor, respirations may not begin within the first few minutes, or may be delayed to the point of some concern. Usually this is simple apnea, a physiologic process, because there is as yet no need for more oxygen within the tissues and the normal chemical stimulation has not as yet taken place. In such a case the general tone is good, the color is bluish pink or dusky purple, the heart rate regular and strong. With these symptoms, all that is usually needed in the way of resuscitation is alternate raising and lowering of the head, brisk thumps upon the soles of the feet or stroking the back with a rough towel. Should the heart rate become definitely slowed or irregular, the administration of oxygen with five or ten per cent carbondioxide through an infant-sized mask and under light pressure is all that is usually required.

We should differentiate between the above described apnea and asphyxia; the latter, in its simplest definition, is a deficient oxygenation of the child's blood. The variance of heart rate, greatly below or above the normal (generally taken as 120 to 140) is our best indication of asphyxia. An infant heart rate of below 100 suggests asphyxia, probably of a grave nature, the seriousness of which increases as the rate remains low.

Causes of asphyxia are numerous and go back into the period of labor and even before, but there are two of these causes which I want to mention particularly, namely, that following a too rapid or forced labor, and the other resulting from drugs or anesthetics.

At the termination of a rapidly expulsive labor, or when quinine or pituitary have been employed to induce or hasten the process, asphyxia may be expected, because of a continued tonic state of the uterus forcing the fetal blood away from the placental side toward the systemic side of the child's circulation, for longer than normal periods, thus hindering the interchange of gases at the placental site. Furthermore, an extreme state of the above leads to the more serious results of intracranial hemorrhage.

With our more extensive use of anesthetics, analgesics, and drugs for pain relief during labor, depression and narcosis of varying degrees up to true asphyxia are to be seen. In this regard, however, the writer intends in no measure to disparage the use of any preparation which will safely alleviate the pains of labor, and especially in the light of the above reference to too rapid delivery and tonic uterus. I am, on the contrary, of the belief that with proper use of sedatives and analgesics

* Presented before the Section on Medicine at the annual session of the Indiana State Medical Association in Indianapolis, October 10, 1934.

we rather cut down the incidence of operative interference, by allowing the mother sufficient comfort for dilatation, moulding, rotation, etc., to occur properly.

Our patients have been and are being told and taught both by the profession and through popular magazines of the wonderful possibilities of relieving childbirth suffering, until in our efforts to meet this demand or to attain results claimed by others we are prone to utilize helpful drugs to the point of serious depression.

Ether alone, in moderate amounts, practically never produces asphyxia whether given by inhalation or in the rectal oil mixture so widely used. On the contrary it is an excellent fetal heart stimulant. As much cannot be said for chloroform or nitrous oxide, yet they have a moderate range of usefulness in obstetrics.

Morphine is widely used for relieving first stage pains, yet its safety and action upon the fetus have often been questioned. Within the past two years, exhaustive and careful observations made by Irving at the Boston Lying-In Hospital, have led him to say: "We do not believe morphine or any of its derivatives should be used during labor as they have a marked effect in delaying the initial respirations of the infant." Further, considering the statement that the routine use of morphine during labor is followed by a higher incidence of fetal asphyxia, as attested by Baer, Piper, Plass and others, and knowing, too, that the narcotized child more often manifests asphyxia after delivery than during labor, and that respiratory center depression is doubtless the cause, may we not limit our use of this narcotic much more strictly, substituting the barbiturates whenever possible to the definite advantage of the newborn babe?

In our personal experience over the past year or two it has been found (although at first with some misgivings) that with the more liberal use of sodium amytal and pentobarbital sodium, the morphine can be greatly decreased in amounts or dispensed with altogether, lessening fetal depression and without detracting from maternal relief.

As to the manner of resuscitation of the asphyxiated child, I would first suggest "gentleness in handling" as the slogan for this condition, as well as for intracranial hemorrhage. With the respiratory passages cleared, the livid infant will require no more than maintenance of warmth and brisk rubbing of the trunk with a towel, just as in the care of the apneic infant. There should be avoidance of severe flexion of the neck and trunk, vigorous swinging or squeezing of the abdominal or thoracic cavity, the use of ice cold tubs or a pulmotor. Fortunately this piece of apparatus is not found in many obstetric set-ups or delivery rooms at the present time; however, the term pulmotor has come to be applied by the lay press to most any sort of resuscitation apparatus even to a simple tank of oxygen.

Several years ago Yandell Henderson advocated combining five or ten per cent carbon dioxide with the oxygen administered to asphyxiated patients, and has applied the procedure with success to the same condition in the newborn. We have found these tanks containing the mixture a most satisfactory piece of delivery room equipment, and reports from men conducting deliveries in the home and in rural districts say that it is a simple method to combine such a tank to their portable nitrous oxide machine. The infant-sized mask is interchanged with the larger one on the supply tube.

Henderson's idea of hyperventilation in babes with sluggish or shallow respirations as noted with partial atelectasis is of importance, even though we do not adopt it for routine use on every normal child as he suggests, since incomplete lung expansion predisposes to pneumonia (a condition more common than we are prone to recognize).

Relative to the asphyxiated newborn, if the simple methods have brought no response, and the heart rate which was strong and regular at first has become weaker or wobbly, the above gas mixture should be applied. Care is taken to use gentle pressure, of the gases, applying the mask ten to twelve times per minute. If the carbon dioxide combination is not available, mouth to mouth breathing, an old but far from obsolete method, or straight oxygen, should be administered at the same rate.

In the deeper cases, such as those where the skin over the body is pale or splotched, in addition to the oxygen carbon dioxide ventilation, the drug alpha lobelin one-half to one c.c. is given intramuscularly, or better into the veins of the clamped umbilical cord. It is a powerful respiratory stimulant and is also of value in those children deeply narcotized by morphine. With asphyxia alone as the cause of depression, the use of adrenalin, caffeine, and other vigorous cardiac stimulants seems not only beside the point, but actually detrimental.

Dealing with the depressed premature infant should recall possibilities other than simple weakness or inanition. These babies have poorly developed cerebral vessel walls, depending directly upon the stage of immaturity. Cerebral hemorrhage, either massive or diffuse, is a hazard to this type of child; now if some maternal disease which so often is the cause of the prematurity, as syphilis or toxemia, is known to pre-exist, the problem is more complex. It is not here possible to discuss the prophylaxis—the most essential treatment of prematures, which often should begin early in the pre-natal state—but I am urged to emphasize one point in the conduct of their (the premature's) delivery; namely, the use of the episiotomy, especially in primiparous mothers; we must not be completely misled by the belief that the head, because it is small in size, can dilate and clear the cervix without trauma to the cranial contents, or that the pressure required to dilate the perineum is negligible; we should not fear criticism of our obstetric technic for doing a mild mutilating opera-

tion, if such it can be called, in order to spare cerebral cells which, if injured, never heal.

The premature must receive gentle handling, warmth, quiet, oxygen freely—perhaps at first with five per cent carbon dioxide. After several minutes or hours, attacks of cyanosis, twitchings or hypertensive fontanelle will tell the story of intracranial injury; but it is well not to wait for such danger signs before giving intramuscularly fifteen to twenty c.c. of whole blood from either of the parents. Should the symptoms appear early, or even after the intramuscular injection, 100 c.c. of whole blood into a vein is more essential. Mortality rates run high in these infants, but may be reduced ten to fifteen per cent by the use of whole blood.

We must anticipate more depressed and damaged babies following operative deliveries such as forceps, breech extraction and version. As our obstetric skill, judgment and conscience improves, there will be less of them. Some birth trauma to the fetus will probably always happen.

Even in the cesarean child delivered at full term, asphyxia or intracranial hemorrhage is known to occur, but this is usually after a prolonged time of hard labor or the free use of pituitary extract or of narcotics before the surgery is done. The average cesarean child needs only to be cleared of mucus and fluid and to be let alone. It is appalling to see the heroic methods sometimes used in an attempt to give to these peaceful infants a so-called start, by the vigorous methods of beating, folding, and swinging. Let us use more care to determine whether they are narcotized or injured, and if so, treat them accordingly; if not, allow them a chance to develop the stimulation they have missed in transit.

Breech extraction, much like the obsolete high forceps, gives us the highest percentage of cerebral hemorrhage. Version perhaps comes next in order, and, finally, forceps of the mid and outlet types are about equally responsible as a cause.

Remembering that birth hemorrhages are, or should be, reported in as high as fifty per cent to seventy-five per cent of newborn deaths, and that trauma is the greatest single cause, and also that deep asphyxia is often actually hemorrhage, may we not give more thought to the probable possibility and diagnosis of this condition in our depressed infants?

If confirmed, our order of care should be to:

(1) Stop the hemorrhage—whole blood.
(2) Relieve the pressure—spinal puncture.
(3) Maintain the action of vital centers—oxygen and carbon dioxide.
(4) Control convulsions—sodium luminal one-eighth to one-quarter grain.
(5) Avoid strenuous mechanical methods of resuscitation.

May I remark, in closing, that unless we have fairly well in mind the causes of delayed or atypical reactions in the newborn infant, our procedures may be actually harmful; and that when cerebral birth injuries are known to exist they are emergencies. Gentle handling is always on the side of safety.

DISCUSSION

GEORGE H. DOUGLAS, M. D. (Valparaiso): I wish to ask Dr. Hudson about the technique of giving the whole blood to the newborn infant. Is there any difference, in giving the whole blood, between the blood of the father and that of the mother? And on what part of the body of the child should it be given, and in what quantities?

DR. HUDSON: I think it is recognized that in giving whole blood to the child it is a little safer to use the mother's blood. But if the mother is under an anesthetic, or if it is thought it may distress her to know that this procedure is necessary, the blood of the father had better be used, intramuscularly, fifteen to twenty c.c., during the first twenty-four hours. The manner of giving it, in the muscles or through the skin, is best, and the blood will be taken up very promptly without taking the time to give it intravenously. It is perhaps better to give it in the thigh or in the back, and if danger signs are present, forty to fifty c.c., on up to one hundred c.c. of the whole blood may be necessary.

GORDON B. WILDER, M. D. (Anderson): Would you think it well to make a practice of using the mother's blood routinely for the purpose of preventing these crises?

DR. HUDSON: I have never considered it routinely, but I think it would be the safe method to use it after every hard or precipitate birth, or after any other than a normal delivery—to use a certain amount of the mother's blood even before the danger signals appear. I am not able to say from personal experience whether it would be well to use it routinely, but theoretically, it would be worth while.

B. M. TAYLOR, M. D. (Portland): I want to commend everything Dr. Hudson has said, and add some things. If in an automobile accident on the street a man was injured, knocked unconscious and was in a state of shock, and was picked up and a couple of doctors came and slapped him on the face and head and punched and shook him, trying to bring him out of his dazed or unconscious condition, and if then he should be taken into a restaurant and this sort of treatment repeated, we should demand the revocation of the licenses of these doctors, and justly so. There is no difference between this treatment of an injured man and the treatment of a baby in shock. Since Cain and Abel were born, babies have been cleansed and put in a warm place to rest and become accustomed to their new condition, and during all these thousands of years that such a method has been used babies have lived and grown under this procedure. When a baby is born, as Dr. Segar has said, he is probably cleaner than he ever has been or ever

will be in his life, and without shaking or pounding, or even so much washing and dressing, he should be wrapped up and put aside so that he may recover from what you might say is his brain injury, for that is what it is. No baby ever was born without a brain concussion. The thing to do with a newborn baby is to handle it just as you would a man with a severe brain injury from an accident—wrap it up and let it stay there for twenty-four hours. He will not spoil, and he will surely be in better condition in twenty-four hours if he is let alone. He will be a better baby, he will not have any brain injury, and will have a better nervous system. If you wrap up a baby, even after hard labor, and lay him aside for twenty-four hours, he will not whine. But if he is given a bath and dressed and otherwise disturbed he will cry most of that twenty-four hours, even though he should come out of it without a brain hemorrhage. This rough treatment after birth is one of the reasons why our asylums are filled and why we are over-run with filling station robbers and bank bandits—due in all probability to brain injuries at birth.

My method has been to take a hypodermic syringe and while the mother is still asleep take from her fifteen to twenty c.c. of blood and give it to the baby, then wrap it up and lay it aside. If the mother makes any inquiry I tell her why I have done it. The babies are better all their lives for such treatment.

THE INFLUENCE OF MEDICINE ON LIFE EXPECTANCY*

HARVEY L. MURDOCK, M. D.
FORT WAYNE

When one studies the average length of life in the United States since the beginning of the nineteenth century, marked progress is noted. In 1800 the average length of life was 33 years; in 1855 it was 40 years; in 1920, 58 years; and in 1929, 59 years. Women live a year or two longer than men. This is attributed to the control of the diseases of childhood and adolescence. In 1900 tuberculosis was in a prominent place as the cause of death. Today it is in seventh place; in other words, the mortality rate has declined more than 70 per cent. Diphtheria deaths are less. Scarlet fever, infantile diarrhea, and other childhood diseases are greatly reduced. Typhoid fever is negligible as a cause of death today.

The death rate of children at ages one to four has declined 60 per cent. There has been a 50 per cent reduction in the death rate of all children. Between the ages of two and eight there has been a 67 per cent reduction in the death rate.

* Presented before the Section on Medicine of the Indiana State Medical Association at the Indianapolis session, October 10, 1934.

Physicians live longer than the general population. In 1905 the physician's average age at death was 60.3 years, and in 1929 it was 64.9 years.

With the elimination of the mass diseases, we come to the modern type. Man is dying individually. Are we doing anything to help him? The fact is mentioned that over seven million of our young men had to be examined to get a little over four million who were healthy enough to do war duties.

Cancer has advanced 2.5 per cent a year for some time. If we make older men, then they are going to live to cancer age. Eighty-seven per cent of all deaths in this country, if not by accident, are from some type of infection. Of every 100,000 persons, 150 are going to die of heart disease, 89 will succumb with nephritis, 90 will die with apoplexy. Death from heart disease comes between the ages of fifty and sixty. One out of every twelve men over forty dies of cancer. Another disease that has shown a steadily increasing death rate is diabetes mellitus. There are probably 400,000 diabetics in the United States today. Physicians should caution patients about over-weight and the intermarriage with families in which there is a diabetic history.

Rather interesting changes have been noted in tuberculosis, pneumonia, and appendicitis. In 1900, 202 persons out of 100,000 died of tuberculosis, while in 1932 only 63 out of that number died. In 1900, 180 per 100,000 persons died of pneumonia, while today the rate is only 77 per 100,000. The reverse is true with appendicitis; in 1900, 10 out of 100,000, died, while in 1932, 14 died. Regardless of its practical importance, appendicitis still continues to be neglected as a public health problem. The cause for the mortality increase is unexplained. Doctor Dennis attributes the increased mortality to incompetent surgery by incompetent and inexperienced surgeons.

Why is it that, whereas, the total number of persons who reach middle life has been enormously increased, the relative percentage of those who reach three score and ten has not been correspondingly increased? There is no known normal length of human life. In the problem of life expectancy there are many factors to be considered, of which heredity is the most important. Look back and see what caused your forefathers to die. This will help in determining the length of life.

Deterioration of the arteries is the underlying cause of heart disease in persons past forty years of age. With the increasing blood pressure more work is put on the heart in keeping up the increased pressure in the arteries. Sooner or later the heart enlarges and becomes exhausted and heart failure develops. This is the most common cause of heart death in people past forty years of age. Coronary disease is another, caused by the arteriosclerotic decay of the coronary arteries, which gives the picture of angina pectoris. Arteriosclerosis, senility, brain decay, mental deteriora-

tion, apoplexy and paralysis—all of these are the final results of a general arterial decay.

Man is as old as his arteries. This is more true today than ever. Therefore, inheritance plays the most prominent part in determining the life span. If good arteries are inherited, longer life may be expected. Some people enter life with a good machine and others with a poor one. The first few thousand miles very little trouble is experienced. After reaching the age of forty to fifty, man is driving more recklessly today than formerly; that is, he is living faster and the poor machine does not stand the strain and breaks down.

There seem to be more people starting life with inferior stock in their vital parts. These new machines are protected by our scientific discoveries, but as age comes on, early deterioration of the blood vessels occurs.

So far as the race is concerned, one sees inferiority more and more placed at a premium. We shelter the physical and mental defectives so that they may propagate their kind. We allow the blind reproduction of inferiority which must lead to racial deterioration, both mental and physical.

One striking example of a racial experiment was that in which ten million men, the flower of our stock, were butchered during the World War. If heredity is our important factor in determining the quality of the arteries, should we be surprised that they are not wearing as well as did those of our forefathers?

Through the ages mankind has searched for the mysterious secret of enduring life. He has craved some elixir that would aid him to live beyond the alloted span and give him years eternal. The quest goes on, but the reward is not in sight. The transplanters of glands, the injectors of extracts, the promoters of radium and x-ray for rejuvenation provide work of scientific interest. They have not demonstrated, however, that one moment of addition to life, liberty or the pursuit of happiness can be guaranteed to any human being who has submitted to their treatments. When the cells of the human body disintegrate and die, there is no magic potion that can raise them from the dead.

SUMMARY

Medicine has been able to decrease the death rate of persons under forty years of age by controlling and in many instances eliminating the acute infections and contagious diseases which attack children and young adults. These diseases are definitely of bacterial origin and the persons who fall victims to them are in the prime of life when their machinery is still new; as a result thereof, life expectancy has been increased under forty years of age.

When forty years of age is reached, not one year has been added to the life span. What can be done? Of course we should be permitted or required to select better stock in our parents. Since that is impossible we should follow some system of keeping the old machine in running order by:

1. Establishment of constructive ways of living, working, and playing.
2. Correction of physical defects as early as possible by periodic health examinations.
3. Discovery and use of hormones or chemical substances that afford specific means of maintaining the tissues in a state of health.

These lines of effort in varying degrees of development and power must be relied upon to meet the causes of disease, old age, and death categorically.

Life can never be wholly freed from suffering, agony and death, but may be experienced on a higher and less sordid plane. A relatively optimistic philosophy is justified by scientific truth. Man has himself to blame for most of his misery.

347 West Berry St.

ETIOLOGY AND TREATMENT OF IRITIS*

B. W. EGAN, M. D.
LOGANSPORT

It is generally said, or at least used to be, that once a diagnosis is made, treatment is easy. I am wholly satisfied in my own mind that you are very capable of diagnosing iritis, but let me ask if you are easily guided in your treatment, once you have made a diagnosis?

Gifford,[1] in the Detroit meeting, said, "A discussion of the etiology of iritis has a significance now which it did not have twenty-five years ago. Then the treatment was more or less the same, regardless of the etiology; now the diagnosis of an iritis is only the beginning. Most of our efforts should be directed to the determination of the etiology, since this should be the basis of the most effective treatment." This is my reason for confining this paper mostly to the etiology, and to a short discussion of the treatment, and that only in a very general way.

A glance into several text books shows that a modern viewpoint is reflected in only a few of them. Our clinical knowledge has been forced to wait upon the discoveries of the laboratory. It was not until Koch's discovery of tuberculin in 1890, the use of the Wassermann reaction in 1906, and the combined laboratory and clinical work of Billings and Rosenow on focal infection from 1906 to 1916, that we were properly equipped to deal with this problem of etiology.

SYPHILIS

Syphilis has been regarded, generally speaking, as the most conspicuous factor in iritis, yet esti-

* Presented before the Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association at the Indianapolis session, October 10, 1934.

[1] Gifford, S. R.: A Review of the Literature on the Etilogy of Acute Iritis. *Trans. Ass'n for Research in Ophthalmology.* 1930.

mates as to its frequency as a cause vary widely, depending on the clientele investigated and the thoroughness of the study.

The most careful investigation is that of Brown and Irons who examined two hundred patients from the medical standpoint (all white, and many private patients), and found sixty-three among them having syphilis. In only thirty-eight of these, however, did the authors feel that syphilis could surely be designated as the etiologic factor. This estimate of nineteen per cent is in contrast to that of Brown, who found seventy per cent positive Wassermann reactions among two hundred two cases of iritis, mostly in Negroes. Other investigators have estimated as high as eighty per cent due to syphilis. Therefore, the question arises, "What is the evidence on which a diagnosis of syphilis may be based in patients suffering from iritis?" From the ophthalmological standpoint, syphilitic iritis cannot be differentiated from iritis due to some other cause, except in the case of iritis papulosa. The proof of its specific etiology must rest on a study of the patient as a whole.

It is reasonable to assume that iritis in a patient with proved syphilitic infection is due to syphilis, provided the other etiologic factors, such as focal infection, gonorrhoea, and tuberculosis, can be excluded. Even if such factors are present, the presumption of the syphilitic etiology of the iritis is strong, provided it is accompanied by other lesions of syphilis, or, provided it heals promptly upon the institution of anti-syphilitic treatment. An examination for syphilis must include more than the customary blood Wassermann. The proof of the presence of syphilitic infection rests on a number of factors which must be intimately correlated. A history of syphilis is of value when clean cut, but its absence means nothing. In the early and relapsing groups of syphilitic iritis, a positive history is readily obtainable. In considering patients with the lesions of syphilis with iritis, it cannot be too frequently emphasized that the absence of a story of infection is of absolutely no significance.

A complete physical examination is much more important than the history. In early syphilis, other lesions, usually muco-cutaneous, are easily demonstrable. On the other hand, iritis is much more prone to occur as an isolated phenomenon in relapsing cases. The blood Wassermann is most valuable as a diagnostic aid in early iritis, but is of least value in irido-recurrence. Here, however, the easily obtainable history and the usually rapid therapeutic response make the diagnosis. Therefore, an attempt to determine the incidence of syphilis as an etiologic factor in iritis by means of the Wassermann test will reveal instances of early iritis, but will miss at least twenty-five per cent of the cases of early relapsing iritis and of late iritis.

The spinal fluid findings alone are of little value. In early syphilis, half of the cases are uncomplicated from the ophthalmologic standpoint, but in relapsing cases only one-third, and in late syphilis one-fourth of the cases are free from other lesions, most of which are potentially more threatening to the vision than iritis.

The diagnosis of syphilitic iritis depends upon the examination of the patient as a whole. The ophthalmologist is, therefore, falling short of his duty if he does not call in a syphilologist in consultation. I grant that this consultant may be accused of possessing a jaundiced eye that sees syphilis in everything, but, on the whole, his attitude is only that when confronted with a lesion which is often caused by syphilis, and particularly when that lesion may produce some such serious and irreparable damage as blindness, the patient is entitled to, at least, the minimum of a general physical survey before he is denuded of his teeth, tonsils, appendix, gall bladder, or other possible foci of infection. Only too often is syphilis given consideration as a possible diagnosis after, and not before, more elaborate investigations or treatment procedures have failed to heal the eye lesion.

TUBERCULOSIS

Tuberculosis of the iris, like tuberculosis in other parts of the body, is essentially a chronic disease. It is characterized chiefly by the formation of nodules in the iris stroma, deposits on the posterior surface of the cornea that resemble cold mutton fat, and, eventually, the absorption of the iris pigment. The disease process is rarely confined to the iris, but is usually associated with tuberculosis of other parts of the uveal tract. Acute, diffuse iritis without nodules has been reported as tuberculous; but, in most cases, the diagnosis has been made from the clinical picture, and was not verified by microscopic examination or animal inoculation. In the early stage, simple diffuse iritis often precedes the nodular form, and it is possible that in some cases recovery may occur without the formation of tubercles.

Poncet was probably the first person to describe a case of simple acute iritis that was due to tuberculosis. Later, Fonsagrives reported similar observations. Their diagnoses were based on the fact that the subjects under their care had active general tuberculosis at the time the ocular process appeared. Their conclusions, however, were not verified by pathological findings, or by the demonstration of tubercle bacilli in the ocular fluids. Vigne saw a case in which there had been recurrent attacks of iritis. Thinking that iridectomy might favorably influence the disease, he excised a portion of the iris and introduced it into a guinea pig. The animal died in due time from generalized tuberculosis. Iridectomy did not cure the disease as Vigne hoped, but it recurred and tubercles appeared in the iris stroma. The general condition progressed, and the patient eventually died from tuberculosis. His case was one of acute, recurring, diffuse iritis that eventually

ran a chronic course, and was similar to the acute iritis that occurs from causes other than tuberculosis.

Heine describes a case as acute tuberculous iritis in a man having symptoms of general tuberculosis. After rest, general hygienic treatment, and improvement in health, the iritis subsided and did not recur. He based his diagnosis on the simultaneous improvement in the two conditions, and gave no other evidence that might prove conclusively that the process was tuberculous in character.

In a critical review of the literature, it was found that most of the recorded cases of acute tuberculous iritis were no more convincing than those of Poncet and Heine. Without the presence of nodules in the iris, it cannot be differentiated, clinically, from other forms of acute diffuse iritis. The only means available for accurate diagnosis is histological examination or animal inoculation of excised iris tissue. This is obviously impracticable in most cases. Most authorities today take the stand that in most cases in which the etiology cannot be ascertained by any of the methods at our disposal, a diagnosis of tuberculosis, based on the skin reaction resulting from the use of tuberculin, is not justified. The acute symptoms may usher in a chronic tuberculous iritis. The painful photophobia and other symptoms may be less severe in tuberculosis, but in other respects the symptoms may be the same. In a few weeks, however, "mutton fat" deposits appear on the posterior surface of the cornea in the tuberculous type, and nodular thickenings appear in the iris stroma, or on its surface. Careful search with the corneal microscope reveals evanescent grayish nodules at the papillary margin of the iris. These signs may also be present in syphilis and sympathetic ophthalmia, but by the exclusion of these, the diagnosis is easy. Acute attacks may also occur during the course of a comparatively chronic iritis.

Much has been contributed to our knowledge of tuberculosis of the eye by animal experimentation. From this study of tuberculosis in animals, it is evident that iritis of tuberculous origin may begin in an acute form, but that the acute process is usually an early manifestation of what will eventually be a chronic disease, and in this respect it conforms closely to what occurs in man. Old tuberculin is used subcutaneously, also, for diagnosis. Heine states that this is risky, since the majority of individuals react to from five to ten milligrams of old tuberculin. In Germany and Austria, tuberculosis of the uveal tract, not the iris alone, is estimated up to fifty per cent. In this country it ranges from four to twenty-five per cent.

FOCAL INFECTION

Twenty years ago, four etiologic factors were outstanding in cases of iritis: syphilis, tuberculosis, rheumatism, and the so-called idiopathy. Since then an increasing importance has been associated with various types of focal infection, with the result that in this country most cases that would have been regarded as rheumatic and idiopathic in the past are now classified under the focal infection group. While we have assigned most of our rheumatic and idiopathic cases to this group, physicians on the continent, particularly in Germany and Austria, have apparently shifted them to the tuberculous group. As a result of these changes, we now have three prominent groups: the syphilitic, the tuberculous, and the widespread group of affections comprised in the focal infection group. Focal infections as a group contribute the highest percentages in our American literature. Oral sepsis and the disturbances of the pharyngeal ring constitute the highest group. Brown and Irons conceded forty per cent to teeth and tonsils, excluding their involvement as associated conditions. When we come to the nose and accessory sinuses, to the genitourinary tract, the gastrointestinal tract, which might include the gall bladder, there is a sharp falling off. Gifford says that no one ever produced iritis with organisms from the intestinal tract, nor isolated any specific toxins which produce such lesions.

While the teeth and tonsils have maintained their dominance in this group as a whole, the importance of the accessory sinuses has gradually decreased. The genitourinary tract deserves a proper amount of consideration. The gonococcus still has a place in the etiology of iritis, but is not considered as important as it was twenty years ago. In the light of our present knowledge, the genitourinary tract, and especially the prostate, are of great importance in the male sex, but uterine disease, menstrual disturbances, and leukorrhea have all been recorded as contributing to uveal disease in the female.

As has already been stated, focal infection has been given prime importance and is the best understood of all the etiologic factors. We have emphasized it to such an extent that we are accused in Europe of letting it overshadow all other causes. There may be an element of truth in this. Holloway[2] of Philadelphia states it in this way: "In the presence of a focal infection, are we justified in positively asserting that it was the underlying cause, even if the patient improves after its removal? Such a sequence is strongly suggestive, but do we not see frequently recurrence after recurrence in spite of the eradication of inflammatory foci at first assumed to be the probable etiological factors?"

Schnable says: "Some patients with ocular inflammation seem to have no possibilities for endogenous infection. Some iritic attacks subside without focal infection therapy."

In the *American Journal of Ophthalmology*, Rosenow and Michele state that the removal or elimi-

[2] Holloway, T. B.: Evaluation of Etiologic Factors in Acute Iritis. *Trans. Ass'n for Research in Ophthalmology.* 1930.

nation of foci, so far as possible, often results in spectacular cures and in prevention of attacks, yet, although of fundamental importance, is not sufficient to solve the problem. Something, therefore, is lacking in our present knowledge to fill in the gap.

A little book by Alan C. Woods,[3] entitled "Allergy and Immunity in Ophthalmology," published by the Johns Hopkins Press, offers the following contribution, which I quote only in part: "The conception that various inflammatory ocular diseases result from remote infections in other parts of the body is an integral part of the doctrine of focal infection. This doctrine, in its first conception, expressed the belief that organisms from remote foci of infection enter the blood stream, giving a transient bacteremia. Organisms thus transported by the blood stream find secondary lodgement in the joints, kidneys, etc., and there set up definite disturbances manifested clinically as arthritis, nephritis, etc. These secondary lesions are supposedly due to bacteria carried from the primary source of infection. The primary sources of infection are usually minor, such as periapically infected teeth, infected tonsils, infection of the paranasal sinuses, the appendix, gall bladder, genitourinary tract, etc. It has long been recognized that bacteria may occasionally enter the blood stream from such foci of infection, and a transient bacteremia, as assumed in the theory of focal infection, may frequently occur. A well known example is the transient bacteremia usually found in endocarditis. It is noteworthy, however, that the secondary inflammations usually follow minor infections and are not observed clinically from such primary massive infections as empyema and psoas abcesses. If these secondary disorders, be they in the eye, the knee joint, or elsewhere, result from direct bacterial metastasis from the primary focus of infection, it should theoretically be possible to cultivate simultaneously the same organism from both the primary and the secondary focus. Yet, almost without exception, such simultaneous cultivation of the same organism is impossible. The organisms recovered from the secondary focus of infection are, therefore, usually classified as secondary invaders, assuming the essential correctness of the theory of focal infection.

"The marked therapeutic improvement observed in many ocular inflammations after eradication of distant foci of infection is well known. Likewise, there is a great amount of clinical evidence indicating the relationship of distant foci of infection to inflammatory conditions of the eye. Yet it is equally true, in a certain percentage of cases, that eradication of foci of infection has no apparent influence upon the ocular disease.

"Kolmar and other authors have pointed out the frequency with which sterile cultures are obtained from the iris and aqueous in acute iritis. This suggests that some factor other than actual bacterial infection may be responsible. Flareups of inflammation are frequently observed in iritis when a vaccine, prepared from bacteria recovered from a distant focus of infection, is administered subcutaneously. Such flareups indicate a hypersensitivity of the ocular tissues to the bacteria or their products, and suggest an allergic relationship between the ocular inflammation and the primary focus of infection.

"As early as 1902 Menzer offered the suggestion that immunity may play a very definite part in the production of certain arthritic conditions. He believed, in such conditions as tonsilitis preceding arthritis, initial infection led to a general dissemination of streptococci, and the inflammation in the secondary focus occurred only after immune bodies had been formed. The secondary reaction might therefore be regarded as an allergic phenomenon. In recent years it has been demonstrated that certain strains of streptococci and staphlococci produce soluble exotoxins of high potency, and the infected individuals may be hypersensitive to such toxins. Thus, Burky has recently shown that certain strains of staphylococci recovered from the eye infections produce strong soluble exotoxins. Hypersensitivity to such toxins is usual in the infected patients and the proper administration of such exotoxins in rabbits produces a strong precipitating antiserum which protects the animal against lethal doses of these organisms. He has further shown that the age factor influences the susceptibility of rabbits to the action of the exotoxin, old animals being vastly more susceptible than young ones. These observations—the difficulty of explaining many ocular inflammations on the basis of simple bacterial metastasis, the evidence of specific hypersensitivity of the ocular tissues, and the relationship of bacterial toxins to such sensitivity—have given rise to the idea that many ocular inflammations, supposedly due to bacterial metastasis from remote foci of infection, may in truth be specific allergic reactions. Thus, one may suppose that bacterial products or toxins from a remote focus of infection may reach the eye through the blood or the lymph and produce a definite hypersensitivity of the ocular structures. Further absorption of the bacterial products or toxins from the primary focus of infection evokes in this sensitized tissue an allergic inflammatory reaction. What direct experimental and clinical evidence can be advanced in favor of such an hypothesis?

"The experimental work of Swift and Derick and their co-workers bears directly on this. These authors found that by proper inoculation with nonhemolytic streptococci a specific bacterial hypersensitivity could be produced in animals, quite comparable to the tuberculin hypersensitivity shown by tuberculous animals. They showed that the eye participated in this general hypersensitivity. After this sensitivity had been produced, if the anesthetized cornea was scarified and a drop

[3] Woods, Alan C.: Allergy and Immunity in Ophthalmology. The Johns Hopkins Press. 1933.

of specific culture introduced into the conjunctival sac, a definite interstitial keratitis resulted, somewhat similar to that formerly produced by Wessely with foreign serum. The bacterial hypersensitivity thus produced was not strictly specific from the standpoint of strain specificity of the streptococcus. These authors also showed that patients with rheumatic fever were hypersensitive to various streptococci, and such patients gave a delayed general and febrile reaction when injected intravenously with minimal amounts of killed streptococci and their toxic products, the reactions resembling delayed tuberculin reactions. They emphasized the point that the production of this allergic state to the toxin and other products of the streptococci was best produced through a focal lesion maintained in the animals for months. Such a focal lesion the authors produced by an agar focus infected with streptococci. They were unable to produce hypersensitivity through direct intravenous inoculation, and conceived that a localized area of infection was necessary for the production of the allergizing substance.

"This question was further studied by Julianelle, using the derivatives of pneumococci as his antigen.

"Mott and Kesten sensitized the eyes of rabbits by direct anterior chamber inoculation of an yeast-like fungus, and found the later intravenous injection of the soluble protein-free polysaccharids derived from the fungus produced inflammatory reaction on the sensitized eyes.

"Summing up these experimental studies, it has been clearly demonstrated that bacterial infection of a certain definite type produces a definite hypersensitivity of the ocular tissues. The requirements for the production of such an ocular hypersensitivity are that the bacterial products be absorbed either from a small localized lesion with tissue destruction, or from the cutaneous structures. Such absorption is quite comparable to that occurring clinically from foci of infection, such as a periapically infected tooth, diseased tonsils or infected sinuses, conditions commonly held responsible for secondary ocular inflammation.

"It must be conceded that there is no clinical proof that these ocular diseases are allergic. The clinical proof of this hypothesis will be difficult, if not impossible, to bring. First, it must be demonstrated that a specific ocular hypersensitivity exists to the bacteria, or to the products of the bacteria, isolated from the primary focus of infection. Second, it must be demonstrated that the hypersensitivity, and not bacterial infection, is responsible for the ocular inflammation. Since experimental procedures are usually impossible on the human eyes, the best evidence that can be produced for this will probably be that the proper desensitization of such patients is accompanied by clinical improvement in the eyes.

"The solution of this problem lies in the demonstration that strongly positive skin tests to the products of streptococci and staphylococci are present in patients with iritis or uveal disturbances apparently secondary to a focus of infection. It must be demonstrated that such sensitivity exists to products of organisms, or the organisms themselves, isolated from the primary focus of infection; that the hypersensitivity shown by the patient is greater than that shown by the normal individual to such an antigen; and, finally, that therapeutic improvement, beyond what might reasonably be expected from non-specific protein therapy, follows the use of such bacteria or bacterial products as a vaccine.

"Conclusive proof is lacking that an allergic mechanism may be responsible for inflammatory lesions of the eye from chronic foci of infection. Such an etiology, however, is suggested by the recent and rapidly accumulating volume of research work on the hypersensitivity and allergic reactions associated with foci of infection, and the clinical hypersensitivity to bacterial products found in a variety of chronic and acute diseases. There is today probably no phase in ophthalmology which offers such promise, both from the viewpoint of animal investigation and clinical therapeusis, as does this field."

TREATMENT

In the beginning of this paper, I made a statement that most of our efforts should be directed to a determination of the etiology, since this is the basis of the most effective treatment. It naturally follows, then, that the basis of all our treatment is the general treatment of the etiological factor in any given case. It is, therefore, the accepted general treatment for syphilis, tuberculosis, or for the removal of focal points of infection, whichever may be responsible for the case at issue. Our further treatment of the case is the local or symptomatic treatment. The objects of local or symptomatic treatment are: First, to dilate the pupil and keep it dilated. This avoids complications by preventing adhesions between the iris and lens capsule, or will break them up when once formed. Second, to immobilize and put at rest the ciliary body, theoretically putting the eye to bed. Third, to relieve pain and congestion.

Atropine is always the sheet-anchor of treatment. Inasmuch as it contracts the iris, it necessarily diminishes the amount of blood in its vessels, and hence directly counteracts the hyperemia. By paralyzing the sphincter, it fulfills a second indication which requires every inflamed organ to be put at rest. The third action of atropine consists in its rupturing posterior synechiae which already exist and in its counteracting the formation of new ones, through the dilatation of the pupil that it causes. The amount of atropine administered must be carefully regulated according to the degree of the intensity of the iritis. During the period of the increase of the inflammation, it is usually difficult to obtain dilatation of the pupil, because a

spasm of the sphincter exists. In this case, we must instill atropine several times a day. If this does no good, we place a little granule of atropine in substance in the conjunctival sac; this is better than to instill the solution too frequently, by doing which, irritation of the conjunctiva is readily set up. Cocaine and atropine together have been recommended as more effective, but habit formation and idiosyncrasy for cocaine are not in its favor. A drop or two of one per cent atropine injected under the conjunctiva once or twice daily adds greatly to the success of the treatment. In stubborn cases, leeches applied to the temple will not only relieve the pain, but cause the pupil to yield to atropine where it had previously been rigid.

The choice of other mydriatics such as duboisine, scopolamine hydrobromide is sometimes desirable. Another very effective mydriatic is glaucosan.

In violent inflammation, moist, hot compresses afford the best results, especially for the relief of pain. Cold compresses are generally not well borne, and are suitable only for recent cases of traumatic iritis. Dionin introduced into the conjunctival sac, either in the powder or in solutions of gradually increasing strength, acts not only to relieve the violent ciliary pain, but often exerts a favorable influence on the progress of the disease. Of internal remedies, the main ones that actually relieve pain are the salicyl preparations. These, given to the point of toleration, have a most important place in the treatment of iritis. Gifford recommends one grain for each pound of body weight in cases of average severity.

Diaphoresis is a most efficient means both of combating the inflammation, and of absorbing the exudate. Mercury, even in non-syphilitic cases, is also quite efficient in absorbing the exudate.

Such hygienic regulations as protection from light, the relief from any sort of eye strain, keeping the bowels open, moderate eating, and abstinence from the use of spirituous beverages are very necessary.

There is a voluminous literature on non-specific protein therapy in diseases of the eye. There appears, however, to be little or no conformity as to the protein of choice. Probably the most generally used protein is milk or its derivatives. Key, however, is partial to the use of diphtheria antitoxin.

Early in the history of non-specific protein therapy, some evidence was produced that the therapeutic action of milk was dependent upon its bacterial content; and bacterial vaccines and toxins of one or another type have been used extensively as non-specific agents. The bacterial vaccine most frequently used as a non-specific agent, however, is the standard typhoid and paratyphoid vaccine. The vaccine is given intravenously. Howard states that the first dose should never be over twenty-five million organisms. Allen of Chicago recommends seventy-five to one hundred fifty millions. The use of typhoid vaccine is contraindicated in patients with fever and low vitality.

The extensive literature on non-specific protein therapy indicates that excellent clinical results follow the use of a large number of substances, and does not indicate any one substance to be the protein of choice. However, milk and its derivatives, diphtheria antitoxin, and bacterial vaccines, especially the typhoid, are the ones most commonly used.

In the use of any form of non-specific protein therapy, a note of caution must be sung. The importance of graduating the shock to the general condition of the patient must be noted. In the use of diphtheria antitoxin, the danger of producing a definite anaphylactic reaction in a hypersensitive patient must be considered.

OPERATIVE PROCEDURES

Paracentesis is performed whenever increase of tension sets in. It may also be tried in cases of long persisting inflammation which will not yield to other remedies. Iridectomy is not performed while the inflammation still exists, since, if we perform it then, we have reason to fear that the newly made pupil would be closed up again owing to a continuance of the exudative process. Hence, we undertake the iridectomy only when we are compelled to do so because of the development of an increase in tension, or, as a last resort, in order to put an end to the iritis when all other means have failed. In fact, in many cases, an end is put once and for all to recurrences by this means, while in other cases, the subsequent recurrences are, at all events, rendered lighter.

Enucleation comes up for consideration only in those cases in which incurable blindness has already set in. It is then indicated, first, if the eye is permanently inflamed and painful; second, if we suspect that there is a neoplasm in the inflamed eye; third, in case of sympathetic irritation; fourth, if the sympathetic inflammation of the other eye threatens to occur.

SUMMARY

1. Etiology and not diagnosis is the guide to effective treatment.

2. The cooperation and help of a good internist or a specialist should be invited in establishing the true etiological factor, and in planning the course of systemic treatment.

3. Allergy, especially in relation to focal infection, may open up a new field as an etiological factor and thereby help us in the treatment of a group of diseases in which we have heretofore somewhat failed.

4. Protein therapy is a big help in certain cases, but it is not yet on a firmly established scientific basis.

5. Treatment is a three-fold proposition: first, systemic; second, local; third, surgical.

408 North St.

DISCUSSION

Charles J. Adams, M. D. (Kokomo): I have been very much interested in this comprehensive survey of the subject. Those of us who are in private practice and located in the smaller communities do not see as many cases of iritis as those who live in the larger cities and are connected with large free clinics. Therefore, our clinical knowledge of this disease must be rather meager.

I do not believe our knowledge of the etiology and treatment of iritis has changed very much in the past twenty years. We know that when we find an iritis, the inflammation is caused by bacteria or toxins brought to these vascular structures by the blood stream. We also know that when we are able to discover the cause of the blood stream pollution, whether it be a generalized infection like syphilis, or a focal infection like chronic tonsillitis, if we remove the disease, the case is quite easily cured. We are also able to palliate the symptoms by widely dilating the pupil, the injection of a foreign protein like typhoid vaccine, etc.

The patient demands immediate relief from his discomfort and permanent relief from future attacks. Unfortunately, the patient is not willing always to have a thorough examination made after he has been relieved of his pain. It behooves us, however, to insist that this be done and adequate treatment be given, not only for the welfare of the eye, but for the general well-being of the patient, as a thorough investigation often reveals disease that is doing the patient general damage.

I had the honor and pleasure of listening to Brown and Irons' presentation of their report of their first one hundred cases before the Chicago Ophthalmological Society about 1915 or 1916. Later on, after the war, I read the complete report of the examination of their second one hundred cases. I review the current literature conscientiously and I do not believe, to my knowledge, there have ever been two hundred cases of iritis as carefully and thoroughly searched for the etiology as these. The facilities of the Cook County Hospital were exhausted in this minute and painstaking effort, and their results should be accepted and I believe, from the references to them in the literature, have been accepted as being as exact as human ability can make them. The majority of reports that are published with regard to the etiology of iritis cases are many times valueless because of limited research facilities and few cases.

It is not necessary for me to review the etiology of this disease or its treatment, as this has been done very thoroughly. It is sufficient for me to say that in the practical handling of our own cases, the examining procedure outlined by Brown and Irons will be found to be exceedingly helpful in discovering the etiology in each case. One significant statement made in the first report has stuck with me from that time. This statement was that while they were able definitely to decide that the etiology of a certain percentage of the cases would be found to be a single factor, a large percentage of the cases had two or more factors that must have collaborated in the causation of the disease. We know that syphilitic iritis responds very nicely to antiluetic treatment, yet we cannot be absolutely sure that a secondary focus of infection may not be playing at least a minor role in the causation of the disease.

In the few cases that I see, I relieve the major symptoms as soon as possible with the indicated medication, and then if I have the patient's consent, see that a very careful examination of the patient's body is made for other etiological factors. These may be exceedingly difficult to discover, but the effort is well worth while. Only occasionally will a failure to find the causative factors be encountered. I remember a patient, in a Chicago hospital, with a chronic irido-cyclitis with acute exacerbations who had had everything done that I have ever heard of, yet his disease persisted. There was no lues. His tonsils and adenoids were gone. His nose was absolutely normal. His appendix was out. His gall bladder had been investigated and his gastrointestinal tracts were absolutely normal. His genitourinary tracts were normal. His teeth were all out. This man was very well to do and he had been examined and re-examined by the very best men in this country, and no definite etiology was discovered. However, it has been my experience that these cases are rare and the majority of the patients can be helped if they give you their enthusiastic cooperation. As a rule, those cases that I have not absolutely cured have quiet eyes for long periods of time, with only occasional acute flareups which are quite easily handled.

I believe, outside of syphilis and gonorrhea, which undoubtedly are responsible for a great many cases of iritis, that the teeth have a foremost place in its etiology. The English do not feel that the teeth play a very great role in its causation, and evidence this belief by absolutely neglecting their mouths. Some of the very best groomed men I have ever seen were some of the leading professors in Moorefield's Hospital, but some of the most filthy mouths I have ever seen were exposed when these men opened their lips to speak. A physician can only judge from his own experiences and, in my practice, I have found a good many cases that at least became quiescent with no recurrences after I had the mouth put in good shape.

Dr. I. Pilot, in discussing a paper on iritis by Dr. E. F. Traut, said the work of Rosenow, Brown and Irons added a great deal to the theory that the streptococcus was the cause of iritis. He added that Rosenow and others thought that the streptococcus must have a peculiar affinity for the iris. Again, he stated that another factor must be present, namely, a superior type of inflammatory response, an increased response to an infectious agent. He said that most people did not react to an injection of streptococci, or streptococcus vaccine.

but in iritis cases, small doses of streptococci found tissue that had become sensitized and a marked reaction occurred. In iritis it was necessary to have not only a focus, and an organism, but also a tissue factor which was labelled the local allergy of the disease. There were sometimes some other factors to be considered; for example, certain types of people with vasomotor instability, climatic factors, heredity and constitutional factors. There were cases of iritis where the lesion was localized on account of trauma.

Dr. Peter C. Kronfeld said that ophthalmologists were trying to explain iritis from one cause such as a focus of infection, but the difficulty arose from the fact that such foci were by far more frequent than examples of iritis. Tonsillitis was probably a million times more frequent than the iritis produced by tonsillitis.

Dr. Jackson in a paper in a review of literature of chronic uveitis, said that the most important work has been done in the past thirty years. Interest has become fixed especially on the determination of etiology. As this becomes better understood, prevention becomes possible. An exhaustive amount of work has already been done but much remains before the subject will be clear. The literature of experimental uveitis shows the very wide range in pathology and biochemistry our studies must take before we can master an adequate working knowledge of the subject.

Dr. Myer Solis-Cohen, in a paper entitled "Why Otolaryngologists Frequently Fail to Remove a Focus of Infection," said that the impression that the otolaryngologist can remove a focus of infection is based on the common misconception which concentrates attention on infected tissue rather than on the infecting bacteria. Removal of foci of infection too often means removal of infected tissue with the infecting organisms still remaining in the adjacent tissue, continuing to live, multiply and elaborate toxins. Recovery occurs only when the infecting germs and their toxic products have been overcome by the patient's defensive forces.

The presence, or even predominance, of a microorganism in an infected tissue or secretion is no indication of an etiologic relationship. This illustrates that the identification of the causal factor or factors in iritis is not an easy matter. Supreme patience and a thorough knowledge of the disease and its etiology are requisite for success in the handling of each case.

K. L. CRAFT, M. D., (Indianapolis): I would like to ask Dr. Egan if he has noticed any difference in the number of cases of iritis found in known allergics and in other classes of patients who are not allergics?

DR. EGAN: I think I specified in the beginning not to ask me questions. I believe this question might open up the discussion caused by Dr. Adams' case in which no infection was found. Dr. Adams said, in that particular case which he cited, that there was absolutely no possible source of infection found. All I aim to say is this—here is a new field that we may enter.

D. O. KEARBY, M. D. (Indianapolis): In a city the size of Indianapolis, the otolaryngologists and the ophthalmologists limit their practice to one of the two specialties. If we otolaryngologists have a case referred to us with iritis, or various infections of the eye, the ophthalmologist wants to know if there is a foci of infection about the nose or throat that might cause the eye infection. It is impossible, in my experience, always to tell absolutely that the patient has sinusitis or not, or to look at a tonsil and say that that tonsil is infected or not. I have had experience in eighteen or twenty cases of eye pathology, in which we have been looking for foci of infection. As I think back over these cases, I believe one-half of them that have been operated show absolute failure of relief from their eye disease. We have had most remarkable results in others. It has been said that there isn't anything for one to do, when you find infection, but to operate. I wonder how many would get well if we didn't do anything?

A woman who had seen nothing much for two months had all sinuses opened. Within a short time her vision cleared, and she has been practically well for almost two years, except when she gets a head cold. Another case: a woman lost the sight in one eye, eight years ago, and recently began to lose the sight in the other eye. She had tonsils, but to look at them and say they were infected, I could not do it. I could express a little exudate from each tonsil, and we removed them. Two weeks later the sight began to return, and in two more weeks this girl was asking if she might not return to work. Another case: a man, where infection was definitely found in the tonsils; we took out the tonsils. The x-ray showed some cloudiness in the ethmoidal and sphenoidal regions; we opened the sinuses. He still is blind.

From the otolaryngologist's standpoint, we have such varied experiences in these cases that one becomes discouraged. Dr. Egan's paper inspires one to carry on.

DR. EGAN (closing): One thing I would like to say, and that is that I did not mean that we must establish etiology before we start to work. If we did that, we would all starve to death here in America. In Europe they can do that. I did not mean to say that I never start to treat a case until I make a diagnosis and establish the etiology. We cannot do that here, for in the meantime the patient will go somewhere else.

That goes with the statement that I heard Dean of St. Louis make in reference to sinus disease. He said that whether the patient is or is not allergic, if we can or cannot prove that the sinus has an allergic basis back of it, if the sinus needs washing out, there is no reason why we shouldn't wash it out. So with these cases of iritis; we must

remove every point of focal infection as soon as possible, and therefore we call in the otolaryngologist. What I tried to say is this—how often does this fail? The patient still goes blind occasionally. Recently a case of my own was found with antrums filled with pus; they were opened and drained, and within twenty-four hours the patient could see me; but the sad part was that in three or four weeks, the whole thing returned, and then all the sinuses were clean. How can that be explained? Allergy may come in and help us in some of those cases where we have fallen down heretofore. I do not mean to say that we must stop treating sinuses.

FAMILIAL HAEMOLYTIC JAUNDICE*

Splenectomy in Mother and Daughter

FREDERICK A. LOOP, M. D.
LAFAYETTE

An unusual occurrence in the treatment of familial haemolytic jaundice has prompted a report of the two cases in question. I have been unable to discover a report of splenectomy in mother and daughter for familial haemolytic jaundice in the literature on this subject. Such a situation is herewith recorded.

The first patient, a white girl, aged six years, was first seen in June, 1926. The chief complaint was jaundice which was thought to have been present during the first week after birth. She had been definitely jaundiced at the age of two and never completely free from it since then. Exacerbations of the jaundice associated with malaise and loss of appetite occurred about every two months, but there had been no severe crises. The past history was otherwise negative, except for measles and the "grippe." The patient's maternal great-grandfather, grandmother, her mother, and a maternal aunt all had had jaundice. All except her mother were alleged to have had gall-stones.

The child was undernourished, and there was slight pallor of the skin and mucous membranes and slight icterus of the conjunctivae. A mass was present in the left upper quadrant, which undoubtedly was an enlarged spleen. The liver was not enlarged. Routine blood studies showed the red cells to be 3,380,000, the haemoglobin 75 per cent, and the white cells 7,250. The serum bilirubin was 3.9 mgm. per 100 cc. with an indirect reaction; the clotting time was five minutes, and the fragility of the red cells was markedly increased, haemolysis beginning at 0.5 per cent and being complete at .44 per cent.

A diagnosis of familial haemolytic jaundice was made, and a splenectomy was done June 26, 1926, followed by a transfusion of whole blood. Convalescence was uneventful, and when the patient was discharged on the sixteenth post-operative day, the blood-picture was normal except for increased fragility of the red cells.

This patient has been seen every year since the operation. Her health has been good, there has been no recurrence of the jaundice, and when she was last seen in August, 1932, the blood studies were normal, although the increased fragility of the red blood-cells persisted, haemolysis beginning at 0.5 per cent and being complete at 0.4 per cent. The reticulocyte count was 0.5 per cent; the icterus index was 10.

The second patient, a white married woman, mother of the first patient, was aged thirty-six years when she was first seen in December, 1922. The chief complaint at that time was of a mass in the upper abdomen. The patient was alleged to have had an enlarged spleen since childhood, and she had been able to feel a ridge in her abdomen for four years prior to the time she presented herself at the clinic. The enlargement of the spleen apparently has caused her no trouble excepting a sense of pressure in the abdomen when lying on the left side. There was also a history of recurrent transient attacks of jaundice but nothing to suggest the occurrence of haemolytic crises. There was no history of abnormal feeding. She was poorly nourished and asthenic. The sclerae were slightly icteric. The tonsils were large and cryptic. An apical systolic murmur which was transmitted to the axilla was heard. The remainder of the examination was essentially negative except for the abdomen which presented a firm, smooth mass projecting from beneath the left costal margin and extending almost to the mid-line. The lower border of the mass was at the level of the umbilicus. Routine blood examination showed a red-cell count of 4,130,000, and the haemoglobin was 75 per cent. The white-cell count was 8,200. The differential count and blood platelets were reported as normal. A pyelogram of the left kidney was normal and showed the tumor mass to be outside the kidney.

In August, 1932, the patient returned, complaining of weakness and fatigability, in addition to the original complaints of jaundice and abdominal tumor. There also had been a moderate loss of weight. On examination there was definite pallor of the skin and mucous membranes and slight icterus of the conjunctivae. The patient was obviously underweight. The mass in the left upper quadrant was apparently about the same size as when the patient was first examined in 1922, and was definitely an enlarged spleen. Blood studies at that time revealed that there were 3,200,000 red blood-cells, haemoglobin 58 per cent, and the white blood-cells numbered 8,900. A differential count and the platelets were reported as normal. There was marked increase in the fragility of the red blood-cells, haemolysis beginning at 0.5 per cent and being completed at 0.4 per cent. A blood smear showed anisocytosis and slight poikilocytosis. The reticulocyte count was 9.1 per cent, the icterus index 15, the bleeding time 1 minute, and the clotting time 4 minutes.

* Presented before Cleveland Clinic Staff, March, 1933.

The diagnosis of haemolytic jaundice was evident, and a splenectomy was performed August 22, 1932. Operation was preceded and followed by transfusion of whole blood. Twenty grains of Blaud's mass was administered three times a day beginning on the day of admission to the hospital and continued after the operation. Convalescence was uneventful, and, when the patient was discharged on the fifteenth post-operative day, the blood showed 4,000,000 erythrocytes, haemoglobin 65 per cent, and 7,100 leucocytes. The icterus index at that time was 4.

The patient was seen about three months after the operation and had gained fourteen pounds. Her color was good; there had been no jaundice; she felt well. Blood studies showed: haemoglobin, 91 per cent; red cells 5,830,000; white cells 10,600; icterus index 5; reticulocytes 0.5 per cent; and increased fragility of the red blood-cells. Seven months after splenectomy, she was in excellent health and had maintained her weight. There had been no recurrence of the jaundice.

In neither of the cases reported here was the pathological report of the enlarged spleens remarkable.

Haemolytic jaundice may be defined as a chronic, haemolytic disease, either familial or acquired, characterized by splenomegaly, varying degrees of secondary anaemia, acholuric jaundice which varies in severity, a typical blood picture, and the occurrence of acute exacerbations with haemolytic crises. Haemolytic jaundice was first described by Wilson,[1] in 1890, as congenital jaundice associated with splenomegaly. In 1898, Hayem[2] described an acquired form of the disease. Banti performed the first splenectomy for haemolytic jaundice in 1903, and reported it in 1912.

The etiology of this disease is unknown, and the primary cause is probably not in the spleen.[3] "The pathogenesis has been explained in two ways: One set of investigators believes that it is essentially an increased fragility of the red blood-cells, in other words, that the cause of the disease is to be found in a perversion of the function of the bone-marrow which produces cells that are more easily fragmented than normal cells. According to this theory, the splenomegaly is merely the reaction of the spleen to the presence in the blood of an increased number of cells that are ready for destruction. The other school believes that the cause of the disease lies in the spleen. This organ, for some reason, is excited to overactivity and destroys more cells than under normal conditions. Neither of these theories is adequate to explain all of the findings in the disease."[4]

The acquired form of the disease is generally believed to be based on some toxic or infectious cause. Meulengracht[5] has stated that the familial type is inherited as a dominant factor. Haden[6] favors the hypothesis that, in the familial form, microspherical red blood-cells of increased fragility are inherited and thus more readily destroyed in the spleen, resulting in hypertrophy of that viscus.

Both the familial and the acquired forms of haemolytic jaundice present the same clinical picture, differing only in severity and incidence. When existing from birth, the former may be termed congenital, and it is much the milder of the two. The latter is encountered about half as often; a more severe haemolysis occurs in it, and its course is more frequently punctuated with haemolytic crises. The salient features are chronic mild jaundice (which is acholuric and does not result in the toxic symptoms of an obstructive lesion), enlargement of the spleen, usually of moderate degree, the occurrence of haemolytic crises characterized by acute attacks of abdominal pain, increased jaundice, fever, a temporary increase in the size and tenderness of the spleen, and general malaise. These crises may simulate biliary colic, but the icterus is non-obstructive and never actually disappears although the patient may be well between attacks.

LABORATORY FINDINGS

The blood yields the most important data, of which the Ribierre or fragility test is diagnostic of the disease. The red cells, as discovered by Chauffard,[7] show a diminution of resistance to haemolysis by hypotonic salt solution, that is, an increased fragility. Normally, haemolysis begins at 0.42 per cent and is complete at 0.32 per cent.

There is a secondary anaemia which is likely to be more severe in women. The degree depends upon the efficiency of the haematopoietic system.[8] It is chronic and usually moderate, although during a crisis the haemolysis may reduce the number of red cells markedly. The color index is high but less than one. The number of white cells is normal but may be increased during and after a crisis. The differential count is unaltered, but the red cells show anisocytosis with a predominance of microcytes. Evidence of blood regeneration is shown by an increase in the reticulocyte count.

A positive indirect van den Bergh reaction is present as a rule, but a direct reaction may be obtained when there is associated disease of the bile-ducts.[9] The icteric index of the blood serum is increased, and the serum usually contains urobilin. The Wassermann test may occasionally be strongly positive when no other evidence of syphilis is present. This test becomes negative after splenectomy,

[1] Wilson: Cited by Pool and Stillman, loc. cit.[4]

[2] Hayem: Cited by Pool and Stillman, loc. cit.[4]

[3] Krumbhaar, E. B.: The History of Extirpation of the Spleen. *N. Y. Med. Jour.*, vol. 101, p. 232, 1915.

[4] Pool, E H., and Stillman, R. G.: Surgery of the Spleen. Monograph, New York, 1923.

[5] Nelson's Loose-Leaf Living Surgery: *Surgery of the Spleen*, vol. 5. pp. 343-391.

[6] Haden, R. L.: Personal Communication.

[7] Chauffard: Cited by Pool and Stillman, loc. cit.[4]

[8] Elliot, C. A., and Kanavel, A. B.: Splenectomy for Hemolytic Icterus. *Surg., Gynec., and Obstet.*, vol. 21, pp. 21-27, 1915.

[9] Pemberton, J. deJ.: The Results of Splenectomy in Splenic Anemia, Hemolytic Jaundice and Hemorrhagic Purpura. *Trans. Am. Surg. Assoc.*, vol. 49, pp. 346-357, 1931.

and manifestations of lues do not develop subsequently.[10]

The urine contains urobilin, indictative of functional inadequacy of the liver cell.[11] It does not contain bile. The stools are normal in color in the absence of complications and contain increased amounts of urobilin. The values for urobilin and urobilinogen in the duodenal contents, as determined by the Schneider test, are increased. This is an index of the blood destruction present at a given time.[12]

Practically all authors stress the occurrence of gall-bladder disease as a secondary complication in haemolytic jaundice, with and without cholelithiasis. The largest series of cases of splenectomy in haemolytic jaundice to date is that reported by Pemberton[9] of The Mayo Clinic (118 cases) in which this complication was found in 68.6 per cent of the patients coming to operation.

The diagnosis of haemolytic jaundice is based upon the history or presence of jaundice, a palpable spleen, and the pathognomonic laboratory findings, chiefly the increased fragility of the red blood cells and microcytosis.

TREATMENT

As expressed by Haden,[6] the rationale of splenectomy is simply the removal of a scavenger which preys upon red cells of increased fragility. The value of splenectomy for haemolytic jaundice had been proved. Surgical intervention is uniformly successful in both the familial and acquired forms. It may be considered almost specific.

Selection of cases for operation is not difficult. The opinion of the majority of authors is reflected by Moynihan's[11] statement that "treatment is by no means always necessary. Where the symptoms are troublesome to the patient, and especially so in the acquired form, recourse to operation should be had in as early a stage as possible." Pool and Stillman[4] believe that the acquired type requires active interference and state that operation should not be performed during a crisis. Wilkie[13] stresses the value of the reticulocyte count in the selection of cases. Should this be increased, it may be assumed that the bone-marrow is competent and that splenectomy will produce clinical improvement. If the reticulocytes are low, however, the bone-marrow is aplastic, and splenectomy will be of little value. Moynihan and Pool and Stillman agree that the operation is not complete without exploration of the gall-bladder and the bile-ducts, although Elliot[14] states that calculi should be dealt with at a subsequent operation.

Grossly, the spleens removed in this disease are enlarged, sometimes being enormous, although generally of moderate size. Microscopically, there is marked congestion of the splenic pulp, which, of course, is found in other conditions. The pigment content of the spleen is increased, which is true also in the liver, kidneys, and bone-marrow. There is usually a slight degree of fibrosis and thickening of the capsule, and areas of perisplenitis may be found. Few adhesions are found at operation.[15] The liver is moderately enlarged as a rule and occasionally shows biliary cirrhosis. The bone-marrow presents the appearance of great overactivity.

The cases of familial haemolytic jaundice usually run a mild course, and the patients are more jaundiced than ill. These patients may never require surgical treatment, and the span of life may remain unaffected. Because a more severe degree of haemolysis occurs in the acquired form and because this type is more prone to develop crises, the disease may prove fatal to these patients.

It is in haemolytic jaundice that the most striking, satisfactory, and lasting results of splenectomy are found. The operative mortality is exceptionally low, especially in competent hands. Pemberton's series from The Mayo Clinic, composed of 118 cases, shows a hospital mortality of 3.4 per cent. Pemberton has noted a decisive influence of secondary affection of the liver on the operative mortality and subsequent longevity. When the liver was affected, the mortality was 5.4 per cent, and 80 per cent of the patients were living at the time this observation was made (1931). In the presence of a normal liver, the mortality was 1.6 per cent and 90 per cent of the patients were living.

Following operation, the jaundice and anaemia improved progressively. The jaundice fades immediately and disappears within two or three weeks. All writers agree that the increased fragility of the red cells may diminish but usually persists and often for many years. This fact Krumbhaar[16] believes to indicate that the "primary cause of the disease is not in the spleen but probably in the erythrocytes themselves." Microcytosis persists. The urobilin excretion and reticulocyte percentage diminish. Elliot and Kanavel[8] found that the crises ceased entirely in their series of forty-eight cases.

The late results are equally gratifying. Probably the oldest case is that of Spencer Wells; the patient lived for twenty-seven years after operation. Pemberton reports 86 per cent of the patients who survived the operation as living and 83 per cent in good health. Only 4 per cent of the eleven subsequent deaths were secondary to haemolytic jaundice. In a few instances, the jaundice has recurred after several years, but it may be stated that, as a rule, the effect of splenectomy in haemolytic jaundice is permanent.

300 Main St.

[10] Giffin, H. Z.: Diseases of the Spleen. The Oxford Medicine, 1932.

[11] Moynihan, B.: The Spleen and Some of Its Diseases. Monograph, Philadelphia, 1921.

[12] Giffin, H. Z.: Hemolytic Jaundice. *Surg., Gynec., and Obstet.*, vol. 25, pp. 152-161, 1917.

[13] Wilkie, D. P. D.: Splenectomy. *Am. Jour. Surg.*, vol. 14, pp. 340-356, 1931.

[14] Elliot. C. A.: Splenectomy for Hemolytic Icterus. *Ill. Med. Jour.*, vol. 32, pp. 18-19, 1917.

[15] Vestal, P. W.: What Patients Are Benefited by Splenectomy? Surg. Clin. North Amer., vol. 2, pp. 321-328, 1931.

[16] Krumbhaar, E. B.: The Hemolyto-Poietic System in the Primary Anemias with a Further Note on the Value of Splenectomy. *Am. Jour. Med. Sci.*, vol. 166, pp. 329-337, 1923.

INTRASPINAL (Subarachnoid) INJECTION OF ABSOLUTE ALCOHOL

For the Control of Pain in Far Advanced Malignant Growths (Case Report)

MAX M. GITLIN, M. D.
BLUFFTON

It is imperative for the physician to alleviate pain in the terminal stages of cancer; it is a trying ordeal for the attending physician, relatives and friends of a patient to witness the months of uncontrollable pain and distress in the terminal malignant cases.

In 1931, Dogliotti reported that he had relieved forty cases of pain in the lower part of the back, the pelvis, and the legs which was due to various conditions (chronic athritis, sciatica, abdominal tabetic crises, and the like) by intraspinal injection of alcohol. Yeomans[1] reported its use in seven cases of malignancy presenting lower abdominal and rectal pain. Recently Saltzstein[2] reported the use of this method in eleven cases of far advanced malignancy: eight cervical, two spinal metastasis from breast carcinoma, and one cancer of the prostate. Relief from pain was obtained in the majority of the cases in his series.

I have used this method in one case of carcinoma of the cervix. My purpose in presenting this one case is that undoubtedly the field of usefulness of this procedure must be very large.

The technic used was that as described by Yeomans.[1]

For visceral and abdominal pain, injection may be made between the first and second lumbar vertebrae, with the patient resting on the side opposite to that affected. The alcohol, in a tuberculin syringe, is injected slowly, drop by drop, until a total of 0.2 cc. to 1 cc. is given, varying with the nature of the case. The patient remains in this position for twenty minutes, then he is rolled onto his back where he rests for two hours. Following the injection, zones of anesthesia or hyperesthesia may appear, and cutaneous tendon reflexes may be diminished or lost.

The motor effects are mild, but temporarily the knees may bend under the patient when he stands or tries to walk. These phenomena disappear in a few hours or at most days. Usually there is no disturbance of bowel or bladder function.

If the pain is not relieved in a fortnight, the injection is repeated at the same level of the spinal cord, but with the patient resting on the opposite side.

The rationale of the treatment is that absolute alcohol, being lighter than spinal fluid, rises and follows the lines of exit of the spinal nerves, hence the necessity of keeping the patient immobilized for some time after the injection.

The spinal fluid is at first under increased pressure, but it returns to normal in ten days. The relief of pain ordinarily lasts for a period of six months.

The procedure is especially useful in far advanced cervical cases. Frequently radium and x-ray irradiations stop the vaginal bleeding, and though the local lesion remains cured, the disease continues to progress in the retroperitoneal glands. In some of these cases within two to four months low lumbar distress and pain on exertion begin, gradually becoming more severe. Soon there is a continuous vise-like backache, sometimes with pain down one buttock or leg almost as severe as the root pains of tabetic crises.

The method is applicable in terminal cases with only a few weeks life expectancy, since the injection is given in bed and it is only necessary to turn the patient over on the side. In some cases the maximum effect of the injection is not obtained for one or two weeks, and transient pains persist during this period, but gradually lessen.

Subarachnoid injection is much more simple and satisfactory than any of the other methods, such as nerve block, removal of presacral sympathetic nerve (laparotomy), or chordotomy which may result in bladder and rectal incontinence.

CASE REPORT

Z. C., white, female, age forty-three, housewife, first noticed about July, 1933, that she had intermenstrual spotting; she was losing weight and felt weak; she had pains in the lower part of her back which became exceedingly severe. She first consulted me in January, 1934.

Past personal history: Had enjoyed good health until the onset of the present illness.

Family history: Irrelevant except that her mother died of a carcinoma of the stomach about ten years previously.

Physical examination: A well developed white female about forty-five years of age, five feet, three inches tall, weight 150 pounds; the skin over her entire body had a yellowish pallor denoting a severe anemia. The chest examination was negative. Abdominal examination did not reveal any masses, but tender areas were elicited over the lower abdomen and the lower lumbar region. The vaginal examination revealed a severely bleeding, irregular, hardened mass surrounding the entire cervical opening; no metastasis could be felt in the adnexa. The rectal examination was negative except for a small rectal fistula opening to the right of the anal opening.

Diagnosis: Carcinoma of the cervix uteri. This diagnosis was confirmed by the pathologist from a biopsy from the cervix.

Management and Course: Palliative radium and x-ray radiations were given on several occasions during February, March, and April, 1934. The

[1] Yeomans, Frank C.: Care of Advanced Carcinoma of the Gastro-Intestinal Tract. *J. A. M. A.*, 101:1141, October 7, 1933.

[2] Saltzstein, Harry C.: Intraspinal (Subarachnoid) Injection of Absolute Alcohol for the Control of Pain in Far Advanced Malignant Growths. *J. A. M. A.*, 103:242, July 28, 1934.

rectal fistula was also operated on. The radiation therapy controlled the bleeding, but the pains in the lower part of the back and in the right thigh and leg increased in severity.

About July 1, 1934, the patient developed a recto-vaginal fistula. Small masses could be felt in both iliac fossae. The pains in the lower part of her back, down the right leg, and in her rectum became excruciating. She could not lie on her back; she cried and was very irritable much of the time. The patient was very weak and it was necessary for her to be confined in bed all of the time. To quiet her, it required three to four hypodermics of one-fourth grains morphine, one and one-half to three grains of phenobarbital, and twenty to thirty grains of acetylsalicylic acid in twenty-four hours.

On July 31, 1934, one cubic centimeter of absolute alcohol was injected into the second lumbar interspace with the patient lying on the left side. The patient rested on her left side for twenty minutes, then she rolled on her back in which position she remained for two hours. It was the first time in a month that she was enabled to lie on her back. There was no noticeable immediate reaction and she rested well that night.

The next morning the patient complained of a slight headache; she was much more comfortable; she was much more interested in her surroundings. She also began to call for food. The patient stated that she did not feel the vise-like pain in her back, although she still had some rectal discomfort (caused by the fistula). There was no bladder disturbance following the injection of alcohol. There was a paresthesia of the outer aspect of the right thigh, although there was no marked weakness of this extremity.

For about two weeks after the alcohol injection the patient remained fairly comfortable although occasionally she required an opiate in order to rest at night because of the rectal discomfort. At the end of the two weeks following the alcohol injection, her pains in the back and legs became perceptible; about that time she had a severe vaginal hemorrhage and a second injection of alcohol was not attempted. The patient was made comfortable for the remainder of her life by heavy doses of opiates hypodermatically; she died on September 9, 1934. An autopsy was not obtained.

Conclusions: A case of carcinoma of cervix uteri with metastasis to retroperitoneal glands and adnexa was injected with absolute alcohol in order to control the pain. Pain was controlled for about two weeks of the last six weeks of life.

Final conclusions cannot be drawn from the report of this one case as to the efficacy of absolute alcohol injection for the control of pain, but it is believed that it is worth trying in the terminal cancer cases, since the procedure is simple. It can be carried out in the home as well as in the hospital, and if pain is relieved, it certainly will be a deed well done.

113 N. Johnson St.

ABSTRACTS

WHAT SHOULD A PATIENT WITH ARTHRITIS EAT?

WALTER BAUER, Boston (*Journal A. M. A.*, Jan. 5, 1935), points out that the first requisite in treating each patient with skeletal symptoms is to determine whether or not the symptoms are due to arthritis and, if so, to determine the type of arthritis. Not until this has been done should one attempt to prescribe a diet. There is no specific diet for patients with arthritides of known origin other than the dietary which would ordinarily be prescribed whenever the particular disease or etiologic agent responsible for the arthritis is dealt with. Gout is the one exception. Degenerative and rheumatoid arthritis represent the diseases one ordinarily thinks of as chronic arthritis. They are not causally related or due to the same etiologic agent. In degenerative arthritis, diet is indicated only in the presence of obesity, and then it should be sufficiently low in calories to allow weight reduction, but adequate in every other respect. There is no evidence to prove that a low carbohydrate diet is indicated in rheumatoid arthritis, nor is there any proof that it is efficacious in curing the disease. Patients with rheumatoid arthritis should eat a diet high in calories (unless they are overweight), high in vitamins and adequate in respect to calcium, phosphorus and iron.

TREATMENT OF PERFORATED "PEPTIC" ULCERS

HUGH H. TROUT, Roanoke, Va. (*Journal A. M. A.*, Jan. 5, 1935), discusses the acute perforations that demand immediate operation. The deductions reached are based largely on personal experience in the treatment of forty-one such cases. This experience has been greatly influenced, however, by numerous visits to other hospitals, conversations with other surgeons, and a careful review of the literature. Of course it is generally conceded, even by the most radical adherents of the nonsurgically inclined of medical men, that surgery offers the best hope of recovery. Therefore the author confines his discussion to surgical intervention in this condition, considered under the following three headings: (1) drainage after closure of the perforation, (2) advisability of immediate gastro-enterostomy following closure of perforation, and (3) treatment of perforations on the posterior wall of the stomach and duodenum associated with hemorrhage, from which he draws the following conclusions: 1. Drainage of the peritoneal cavity should be avoided if possible. 2. Continuous gastric suction through a nasal tube has decreased the indications for an immediate gastro-enterostomy. 3. Partial gastric resection is the operation of choice in those cases of posterior perforations of the stomach or duodenum which are associated with massive hemorrhage.

ASCITES OCCURRING DURING JAUNDICE, WITH RECOVERY

JACOB MEYER and AARON LEARNER, Chicago (*Journal A. M. A.*, Jan. 12, 1935), report a case of ascites occuring during what is generally termed catarrhal jaundice that went on to complete recovery after an observation of three years. The case illustrates the difficulty of presenting a fixed syndrome for so-called catarrhal jaundice and directs attention to other functional alterations dependent on varying degrees of liver injury. The case showed definite evidence of gastro-intestinal inflammation and also of an infectious cirrhosis. The clinical features were those of a catarrhal jaundice during which ascites developed. These observations emphasize the fact that catarrhal jaundice cannot be considered a finely delineated entity but rather a functional disorder in which the underlying pathologic basis may be diverse.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

Office of Publication: 1021 Hume Mansur Bldg., Indianapolis.
Editor: E. M. SHANKLIN, M. D., 5141 Hohman Avenue, Hammond, Ind.

Managing Editor: THOMAS A. HENDRICKS, 1021 Hume Mansur Building, Indianapolis

Editorial Board:
F. T. ROMBERGER, M. D., Lafayette.
T. B. RICE, M. D., Indianapolis.
PIERCE MACKENZIE, M. D., Evansville.
L. P. HARSHMAN, M. D., Fort Wayne.
ERNEST RUPEL, M. D., Indianapolis.

FEBRUARY, 1935

EDITORIALS

THE ASCHHEIM-ZONDEK TEST

Since 1927, when Aschheim and Zondek made their announcement of a modification of a pregnancy test, considerable interest has been manifested in the subject; however, the test was not generally available because the technique was such that few individuals attempted its use. For example, this test requires five immature mice, three to five weeks old, and of certain weights; then, in making the test, each mouse receives six injections during a period of thirty-six to forty-eight hours. What with the propagation of mice and the frequent injections, a laboratory is a very busy place if many of these tests are made. Then, too, a period of one hundred hours must elapse after the injections have been made before the animals are killed and an examination made of their ovaries.

A recent method has been announced by Friedman in which the Aschheim-Zondek test is greatly modified, the technique is greatly simplified and the element of time is reduced. Joseph N. Friborg, M. D., of Manchester, New Hampshire, in a paper[1] on the subject before the annual meeting of the New Hampshire State Medical Society, May 16, 1934, tells in detail of his experience with the Friedman modification. The animal used in this test is the rabbit and a single animal suffices. Since the rabbit ovulates only after coitus, the technician is able to use the same rabbit in a number of tests, it being necessary to maintain the rabbit in seclusion for a period of only eight days before the test is made.

A sample of uncatheterized morning urine is used, care being taken to see that it is properly acidified; if necessary, acetic acid is used. Ten c.c. of the urine is slowly injected into the posterior marginal vein of the rabbit's ear. Forty-eight hours later, under ether anesthesia, an incision is made in the medial line and the ovaries exposed. The appearance of the ovaries determines the result of the test and is carefully described by the essayist. The incision is closed with chromic catgut and the same animal may be repeatedly used for further tests. Dr. Friborg reports results in some sixty-eight tests he has made with this technic and cites a number of case histories that are of more than common interest.

It would seem that the Friedman modification of this test would enable a greater number of the profession to undertake it; certain it is that much valuable information may be gained therefrom.

[1] Friborg, J. N.: Friedman's Modification of the Aschheim-Zondek Test. *New Eng. J. of M.*, Vol. 211, No. 24, Dec. 13, 1934, p. 1089.

ATTENTION, PRESIDENT ROOSEVELT!

No one who has given even meager thought to unpredictable accidents to person or property denies the fact that insurance is the best protection. This the medical profession freely admits. But when compulsion, either by government or organization, is attempted, multiplication of employees and executives, the machinery of operation, occurs so rapidly that, despite all theory to the contrary, practical experience proves a rapidly increasing cost, which in the event of government means increased taxes.

Insurance of soldiers during the great war did not prove a wise adventure as a government activity. Is there any reason to believe that any government-sponsored insurance would be any different?

Have you considered your personal reaction to outside control, limitation of your choice of any personal service affecting you or your family?

Or have you considered your own reaction to outside control, limitation, or your own personal service to others?

Do you want any one, or group, to act under law in any intermediary way between you and your spiritual adviser, your legal adviser, your medical adviser?

Ninety-nine per cent of health and sanitary legislation has been initiated by physicians, and literally pushed down the throats of the public by the medical profession to the detriment of the physician's income.

From time immemorial, physicians have cared for the poor, the unfortunate, and those of limited means, all without recompense, and apparently in the light of today without thanks. The medical profession can still be counted upon to continue the same labor in the future as in the past.

If the schemes of Europe are so far superior to our methods, why is not mortality and morbidity decreased far below ours? The facts are, their mor-

tality is no lower than ours, and their morbidity is higher.

If our present scheme of health care is so in need of change, why has the span of life been so increased? Why the threat by laymen that if physicians themselves do not change the scheme, the government will?

Is all the advancement in medicine and health care in the past fifty years, twenty-five years, yes, even the past twelve months, of so little import in the minds of those who are alive today because of medical science, that they desire in their ignorance to control that of which they know nothing?

Let the medical profession alone. It is the most altruistic, the most far-seeing, the most unselfish, the most hard-working, the most humane group of individuals the world has ever known. Attempt from the outside to control the physician, to fetter him, to direct him, and he becomes self-interested, self-centered, and defensive. Who suffers? Everyone; but the public most.

THE FEAR THAT STALKS IN RUSSIA

It is a strange psychology that causes a modern sociologist to go to the length of holding up the plight of Russians as the ideal for Americans. Yet such is the case in Mr. Kingsbury's championing the solution that Russia has offered to her medical problems. That the same man who writes of the wonders of *Red Medicine* should receive so much consideration for his opinions is even more strange. Americans are asked to pattern their systems of medical care after that now existing in the Soviet Union, a Union whose temperament, degree of intelligence, religious belief, contact with all things cultural is so different from ours that no comparison can be made.

Peter Fleming, English traveler and author, in a recent issue of the Now York *Times Magazine*, says that the 170,000,000 citizens of the Soviet Union are governed, in the last analysis, by fear. That fear is so all-pervading that every worker is encouraged not only to inform against his fellows who slack but is guilty of a counter-revolutionary offense if such information is withheld. He says: "It is clear that that state is in a strong position which can enroll everyone of its citizens as an unpaid private detective; but the situation of a people who, while denied the right of free speech and the intellectual stimulus of a free press, are made the official and all-licensed censors of one another's lives, is, to say the least, paradoxical."

We may not be interested in Russia or her problems but we can not pass up the statements of those in America who assume positions of an advisory capacity to our government when those statements point with pride to the great bureaucratic medical care in the soviet government. Statements of approval by Russian citizens of any governmental plan, agency, or governmental principle, whether it be a medical one or not, can not be assumed to represent the truth when criticism amounts to a direct national insult. Confessions made under duress do not stand in any court of justice. The people of America have the right to demand that those governmental advisers who mention the socialistic medical care of the peoples of Europe in general, not alone of Russia as being Utopian, shall not overlook the fact that our people have a temperament peculiar to the Americas. Both as a government and as individuals, we are not fearful of one another but are distinctly communicative. That country whose people fly more miles, travel more by rail, ride in four times as many motor cars, converse with one another through seven times as many telephones as in all Europe combined, will demand, finally, that its medical care shall be given by those whose pride in individual attainments make for accuracy and precision.

THE ANESTHETIC PROBLEM

Extensive correspondence and personal conversation with surgeons, medical anesthetists, and hospital administrators leads one to believe that there exists in certain sections of Indiana a reasonable doubt as to the proper application of the practice of anesthesia in the hospitals of the many varied communities throughout the state. This need not be so. The basic principles of the ethical practice of medicine apply here the same as they do, or should do, in surgery, obstetrics, and other branches.

The legislative act governing the practice of medicine in Indiana is broad and comprehensive. Read it. It is detailed in its information as to inclusions and as to specific exemptions. Primarily, it is a protective measure designed to safeguard the public weal, so that unqualified practitioners do not foist themselves upon the unsuspecting citizens of this state. The law defines the practice of medicine as "to prescribe for, or to give surgical assistance to, or to heal, cure or relieve, or attempt to heal, cure or relieve those suffering from injury or deformity, or disease of mind or body." If one studies these words and analyzes them, then indeed the atmosphere at once begins to clear.

It was upon the above excerpt of the medical practice act that the Indiana State Board of Medical Registration and Examination based its ruling that the practice of anesthesia was in deed and in fact medical practice and the province of the medical profession. This ruling has been upheld by the Attorney General. No longer can there remain a single iota of doubt in the minds of the forward looking and intelligent thinking Indiana physicians but that this is a move in the right direction. Medical practice, whatever its phase, belongs to those physicians who have been properly educated, duly qualified, and regularly licensed to such practice. They thereby have acquired a specific prop-

erty right—a right distinctly and faithfully guaranteed under the Constitution of the United States. Too long have doctors been educating lay people to do physicians' work. Too long have physicians in some parts of our sovereign state loaned (in effect) their licenses to lay people in the perpetration of a fraud. This is really what occurs when a lay individual performs medical services, as defined in the medical practice act, under the thinly disguised and often inadequately supervised observation of a licensed physician.

In the enforcement of the law and the application of a ruling of this character, it must not be assumed that so precipitate a change can be made over night, from darkness to dawn, as it were. Time to adjust the situation, at least a reasonable length of time, is an essential element. Why? Because the medical profession, itself, first must qualify its members to take over this work—and do it better than it has been done in the past! Otherwise, our efforts will be barren, and we are laboring under false banners with bombastic pretense. The glitter of tinseled camouflage will not long deceive the smart surgeon, the observant floor nurse, or even the intelligent laity. Only the best service must be made available. This means that in every medical and surgical center in this state a sufficient number of doctors must qualify themselves to do grade A work in anesthesia with cyclopropane, spinal, modern gas-oxygen, ether, chloroform, and ethylchloride, expertly adapting with each agent the most reasonable solution to the anesthetic and surgical problem involved. Preliminary narcosis with the nonvolatile agents must be oriented and administered with understanding. Only by intensive, scientific study of the operative risk and by well coordinated effort in the surgery, together with constant clinical research, can the optimum results be attained. In just so much as the surgeons and hospitals of any one center deny these supreme benefits to their patients, then by just so much are we, the intelligent medical profession, derelict in our duty to our public in the communities in which we live and practice.

Shall the members of a progressive medical profession, whatever the community, woefully and shame-facedly admit that they are unable to qualify to take care of every phase of medical practice in their particular community? No! Definitely and decidedly no, be that phase medical in character, surgical, obstetric, public health, anesthesia, or what-not! What an indictment that would be!

Experience dictates, and it is believed and felt that the medical anesthetist attains his highest professional efficiency when he practices anesthesia in his own community without salaried hospital connection but, instead, collects a separate fee for this service. Thus the field remains open. Each kettle sets on its own bottom. Ethical competition provides the necessary stimulus to do scientific work. New talent is developed. The banner of progress is carried ever forward. Mediocrity is discouraged, and he who lags is left behind. Further, neither hospitals nor corporations can be licensed to practice medicine in this state, nor can a physician legally lend his license to them; and, still further, no hospital in any community should be in active competition financially with the physicians practicing in that community and lending their support to their respective institutions, whatever the phase of medicine involved. Where hospital-salaried anesthesia is in effect, it is just as logical to carry the principle to its ultimate conclusion, i.e., that the hospital employ surgeons to do appendectomies and tonsillectomies, obstetricians to do deliveries, urologists to do cystoscopies and prostatectomies, oculists to do refractions, every phase of practice covered—all for a profit. He who runs may read. He who thinks may interpret. Then, like the tongueless, eunuchoid slave of ancient Greece and Rome, the medical profession would become the voiceless servant.

As to the remuneration for anesthesia, intelligent reasoning prescribes that this may vary with the different localities and with the different grades and types of scientific service, just as it does with other medical and surgical attendance. The recompense should be sufficient to leave the anesthetist unhandicapped in his efforts toward clinical efficiency and toward rational progress. Each district presents its problems, all capable of solution. No one ready-made suit of clothes will fit every individual, either in size, price, quality, or pattern. Nothing could be more reasonable.

Medical anesthetists must organize everywhere to take care of their own community's charity and part-pay, just as is done in surgery, medicine, and obstetrics. At no time in the past has the medical profession failed to do more than its duty in this regard. It can be done in anesthesia as well.

Finally, we have within our borders a great medical teaching institution. Its clinical facilities are unsurpassed. We are proud of its standing. We look to it to qualify the vast majority of our future doctors for the practice of medicine in this state. That is its purpose. It holds in its hands the scientific progress of the medical profession of the sovereign State of Indiana. Let us lend our strength and support to this seat of learning, so that it may continue, as it has in the past, to give to its citizenry medical practitioners well qualified in every respect to practice medicine in the nth degree, whatever the phase involved. It can be done—through cooperation.

Cooperation means unity of effort; and, if the medical profession of this state strives unitedly for higher and ever higher standards in medical practice in all its branches, united in every thought, united in every heart beat, then the practice of medicine will remain secure in our hands. Otherwise, some lay individual will dictate to us definitely how, definitely when, definitely where, and definitely at what price.

EDITORIAL NOTES

ARE YOUR DUES PAID? IF NOT, YOU ARE DELINQUENT NOW.

Warren D. Smith, professor of Geology and Geography, University of Oregon, estimates that Mother Earth has room for 5,666,000,000 people. The earth is said to be now populated by 2,024,000,000 persons. We wonder if we are not a bit premature with our birth control propoganda; it seems that there is yet room for expansion.

In this issue, on page 91, is an article by Mr. Will Smith, collector of internal revenue for the District of Indiana, which outlines some of the points to be remembered when preparing your Federal income tax report. Mr. Smith has expressed his willingness to answer any questions and give any help that he can in the proper preparation of your reports.

Among the newly elected county society secretaries for 1935 is M. A. Austin, of Anderson, who assumes that role for the Madison county society. Dr. Austin has long been one of the wheel horses in county secretarial and State Association work. Judging from his initial announcement we should say that the Madison County physicians are going to be put to work this year.

In January, the Clinton County Medical Society invited the members of the Carroll County Medical Society to be their guests, and to supply the program for the meeting. The secretary reports that members of both societies seemed to have a splendid and helpful evening, and the spirit of fellowship exhibited was inspiring. Within a month or two, the Carroll County society will entertain the Clinton County society in a similar way. What these two societies have enjoyed so thoroughly probably would be equally appreciated by members of other county societies. Why don't you try it, Mr. Secretary?

We confess to a moderate degree of modesty but, withal, we remain human. Speaking frankly, we rather like it when, on occasion, the lay press generously comments on our editorials. When we received several clippings from Indiana newspapers, regarding an editorial recently published on regulation of automobile traffic, we felt the effort quite worth while. The number of automobile accidents continues to mount with alarming rapidity and the press is becoming quite wrought up about it. It might be well for the subject to be considered by our Association, through the action of some one of our committees.

The birth rate in the United States continues to decline, the Surgeon General of the United States Public Health Service has reported to Congress. Compensative, perhaps, is the fact that the infant death rate also continues to decline. Comparisons: in 1933 the birth rate was 16.4 per 1,000 population, while in 1932 the rate was 17.4; in 1933 the infant death rate was one (in the first year of life) in every 18 children born, while in 1915 one out of every ten died. There has been great progress, to be sure, but the room for improvement still is great. The time for "resting on our oars" has not yet arrived.

A self-styled cancer specialist of Hastings, Michigan, died recently of cancer. He died just in time to avoid prosecution on charges of violating the Federal food and drug act. According to the U. S. Department of Agriculture, the man had for a long time evaded the Federal law until a shipment of his principal medicine, "Mixer's Cancer and Scrofula Syrup" (composed of potassium iodide, senna, licorice, yellow dock root, sarsaparilla, wintergreen, glycerine, alcohol and sugar syrup) was intercepted in inter-state shipment. The "specialist" was like others of his kind in that he resorted to a regular physician's services instead of his own remedies when afflicted with the condition which his remedies were supposed to cure.

On behalf of American youth, the Indianapolis *Star* nominates Dr. Thurman B. Rice, of the Indiana Division of Public Health, for the office of President of these United States. The *Star* editorially discusses a talk made by Dr. Rice before the woman's auxiliary of the Wayne County Medical Society (Detroit). Dr. Rice is quoted as saying, "If the Lord had intended for us to eat spinach, He would have flavored it." The speaker also vindicated those who have an appetite for pickles and pretzels, and he concluded with the thought that the most rational and reasonable health program can be charted by following the example of the average ten-year-old boy. We have long had the notion that Dr. Rice is plenty smart in health matters; our opinion has been greatly enhanced, since hearing of his latest pronouncement.

Medical journals have, from time to time, carried stories concerning the activities of "eye specialist" fakers, individuals who go about the country claiming to be "great shakes" when it comes to eye trouble, real or fancied. The latest report we have received comes from Frankfort, Indiana, where, according to the *Morning Times*, a "Doctor" Pierce of Buffalo, New York, and a "Doctor" Adams of Logansport, Indiana, inveigled an elderly rural

couple to part with something like a hundred dollars for treatment of an alleged "bad growth on the inner eye." These frauds claimed to be representing Dr. Claude Robinson, Frankfort oculist, and J. Leslie Rowe, an optometrist from the same city. We believe it would be well for our Publicity Committee to prepare a release on this subject; it is an old racket and we had come to believe it was about extinct.

IN reviewing the reports of the annual meetings of the various state medical associations, we are impressed with the number of organizations which pay at least a portion of the expenses of the delegates to A. M. A. meetings. For a long time we have felt that the Indiana State Medical Association should pay the railroad and Pullman fares of our delegates, with an allowance, say, of five dollars per diem. The average physician does not begrudge the money he may spend in furthering the interests of his profession, but in this instance we believe the question is a bit different. Our delegates, four in number, attend a five-day session, which means an average of a week's absence from their practices; the least we can do is to pay their traveling and hotel expenses. We recommend that the proper authorities of our Association carefully consider the matter.

A LITTLE while ago we commented on an article in the New Harmony *Times*, regarding the economics of medical practice in southern Indiana fifty or more years ago. In a recent number of the same little weekly we noted an article on health which attracted our attention. The writer was commenting on the fact that many of the local citizens who figured in the news items of more than forty years ago were now living. This led the writer to the observation that medical science had made great progress in the interim, his statements showing an unusual knowledge of the advancement of the science of medicine. We believe such comments to be of the greatest value in the campaign we are conducting against socialized medicine. Country editor he may be, but this man has sowed seeds of mighty import in the minds of his readers; if occasion arises, they will have already formed a more or less favorable opinion on the subject.

EVERY little while we receive a letter from some Indiana physician relative to the matter of an annual registration of medical men of Indiana. Only recently did a former president of our Association address us on the subject. He gave many valid reasons why such a measure should be enacted, in all of which we most heartily concur. The recent rather arduous task completed by officials of the Indiana State Board of Medical Registration and Examination, that of a complete check and revision of the list of registrants, showed the necessity for an annual registration. We went over their list for Lake County and found eight of our members not properly registered; that is to say, the file was incomplete, for one reason or another. Then, too, it was found that several physicians are practicing in Indiana, none of whom appear on the records of the Board. We are making some inquiries regarding the attitude of men over the state and shall have something to say on the subject a little later.

ONCE more we urge all county society secretaries to bend every effort to increase our membership in 1935. Our goal has been set at 300 new members, an accomplishment entirely possible, if we can but have a united support. Nor should these activities be limited to the secretaries; the membership of each county society should lend every effort to bring about such a desirable situation. We have much to offer the eligible practitioner who for one reason or another remains outside the fold of organized medicine; we have—and we believe this very firmly—the best state medical association extant; we do more things and do them in a bigger and better way; we go places and get the early start; we are thoroughly alive to the affairs that confront the greatest of the professions; we have devised plans to meet almost every emergency that has so far been presented; in short, we have come to be recognized as a live organization. This reputation will be greatly enhanced once we have lined up every eligible in our membership.

THE charity racket long has been known as a means of providing luxuries for charity racketeers. The Indianapolis Better Business Bureau is making a strenuous attempt to put a stop to it, by issuing to bona fide solicitors a "solicitor's identification card" which will show that he is licensed to solicit for charitable purposes in the City of Indianapolis. Every business or professional man, or member of the public, will be enabled to know definitely whether the money he is asked to contribute will really be going into worthy hands, and if, in spite of the identification card, there is some doubt, a call to the Better Business Bureau office will settle all doubt, for there will be a record kept of all those "licensed" to solicit. If people in Indianapolis throw their money away on worthless charity rackets, it will be their own fault, but if the suggestions of the Bureau are followed, a good many dollars will be saved for business and the public. The slogan of the Bureau in regard to investments might be adapted to this enterprise: "Investigate —Before you Give."

THE Surgeon General's report to Congress indicates that there is yet no evidence that the depressed economic conditions of the past few years have lowered the general health of the people in this country. In arriving at this conclusion, death rates alone were not relied upon as an index to the nation's health, but special studies of sickness over a period of several years, beginning in 1929, in 10 localities where the depression has been most

severe, were considered. The studies show higher sickness rates in the economic group rated in comfortable circumstances in 1929 but subsequently reduced to the lower economic class. The vast work of the relief agencies and the fortunate absence of wide-spread epidemics are credited with being important reasons for the continued good health of the nation. For the calendar year 1935 the death rate was the lowest ever recorded in the United States—10.5 per 1,000 population; in 1932 it was 10.8 per 1,000. The report calls attention to the fact that in spite of the economic conditions, the tuberculosis death rate has continued to decrease. Is not this due largely to the watchfulness of physicians who have feared that this particular rate might increase and have, therefore, exerted extra efforts to avoid that probability?

An Indiana optometrist recently registered the complaint that a public health nurse was in the habit of referring refraction cases to a medical man rather than to an optometrist; we were rather interested in seeing just how that problem might be handled by the Division of Public Health. It seems that the solution proved to be an easy matter, and the person who made the decision is to be congratulated on having arrived at the only correct answer; surely the family physician is the most competent person to handle the matter. We append the statement as it appeared in "Echoes of 1935," a very interesting publication sent out from the Bureau of Public Health Nursing, Division of Public Health:

SPECIALISTS—OPTOMETRISTS—OCULISTS

Should nurses refer patients to any one of these groups?

A paragraph from a letter from this department sent to a public health nurse who, an optometrist complained, was referring eye cases to one man for refraction, appears below:

> "Public health nurses inspect children and detect what they consider abnormalities. Children having these apparent abnormalities need to see a physician for diagnosis; they need to see their family physician or a physician of their choice. But a nurse, as you know, is not justified in sending patients to a specialist or to any one physician for any special examination. If a physician, after diagnosing an apparent eye condition, thinks the patient needs refraction he sends him wherever he thinks this can best be taken care of, if he does not feel competent to do it himself."

Then our problem is solved. We don't have to decide. Our only obligation lies in referring the case to the family physician, who further refers it as he considers necessary to the specialist of his choice.

It is interesting how we doctors—of course, I should say some of us doctors—get stung and come right back for more. The salesman with books and magazines to "give" away is a common visitor. Sometimes these offers seem too good to be true, as, in fact, they also turn out to be. A few years ago a salesman, who had been reliable in other years, came in with an unusually good offer of magazine combinations and a few books on the side as prizes. The one-third down was paid and the balance was to be sent to the company. The company, however, said they had not authorized so liberal an offer, and, anyway, they were broke and couldn't send any of the magazines. They didn't know how to get in touch with the salesman. That was the end of the story. Last year a salesman, who had previously sold books for one of the reliable medical book companies, offered as a special inducement ten per cent off for cash if paid to him. The money was paid but no books came. When the company was written to, they had received neither order nor money. They had received many other similar complaints, and although they could not catch up with the salesman they did make good the orders and supplied the books as ordered. Only recently a salesman, supposedly representing one of the best book publishers, was offering to a "chosen" few their new encyclopedia for the absurd sum of $9.91. Several paid the money and received a receipt made out on the company's regular form for the set of books. No books came and upon inquiry the company's answer was that the supposed representative was no longer employed by them, and of course they couldn't supply the books at that price. They mentioned the fact that no money should have been paid to the representative unless made out to the company, and in that case the bank that cashed the check would be responsible for assuming that the man had authority to cash a company check. They could not control company receipts in an ex-representative's hands, they were sorry to state. The moral:

First, do not buy from a representative until satisfied that he is bona fide or at least personally known.

Second, if any money is paid, *the check should be made to the company and not to an individual.*

Third, don't be too gullible. You can't get too much for nothing.

From time to time we have had much to say regarding stream and lake pollution in Indiana. We feel that this is one of the besetting evils in our state, and, therefore, we shall continue to "harp" on that subject. That we have support in other states is evidenced by the fact that the January number of the *Bulletin* of the Department of Health, Kentucky, reports at some length the address of F. C. Dugan, before a meeting of the Ohio Valley Improvement Association, in Cincinnati, last December. The speaker divides stream pollution into two broad classes: (1) pollution not directly affecting the public health, and (2) pollution directly affecting public health. Under the former

head he speaks of pollutions that may be classed as nuisances; that pollution which affects fish life and the use of the waters for recreational purposes; and that which may cause tastes and odors of an undesirable nature. The second class refers to pollution by toxic industrial wastes and to sewage. There can be no question but that all this could well be referred to the Hoosier state. Our streams and lakes, for the most part, are being polluted. Much of this is unnecessary and could rather easily be avoided; all of it can be stopped if we but put forth a concerted effort. The lay public, rapidly becoming health conscious, is beginning to demand action; it is high time that the medical profession of Indiana assume the leadership in a campaign looking toward the abatement of this wholly unnecessary evil.

THE annual report of the executive secretary, as presented before the mid-winter meeting of the Council, shows a total of 890 physicians in Indiana who are classed as eligible for membership in the Association, yet who are without the fold. In the January JOURNAL we suggested a membership campaign for 1935, with our goal set at an increase of 300 members; at that time we did not have available the final report of the secretary, else we surely would have said 500 new members. Almost *one thousand* Indiana physicians are carrying on without the benefits to be derived from membership in one of the really progressive state associations of the country; they do not have the benefits of medical defense; they do not regularly receive one of the best state medical journals published; more than that, and of equally great importance, they do not have the personal contacts with those who are doing everything possible to further the interests of our profession; they are not a part of the program being carried on to the end that medicine may be placed at the highest pinnacle. This little group of figures, 8 9 0, is a challenge to the Indiana State Medical Association and, through the Association, is a challenge to every one of our three thousand members. The picture can be markedly changed during the year if we can but have your support. In your goings-about you will come across this or that physician, in every way eligible to membership in your county society. A word from you now and then may cause him to become a member. Headquarters stands ready to offer every assistance in this campaign and THE JOURNAL will be glad to send sample copies to prospective members. Let's line up every eligible in 1935. Get going!

REPRINTED below is an editorial from the Plymouth (Ind.) *Daily Pilot* which we trust will be read by every member. It is but one of a number of similar comments that have appeared in the "small town" press over the state during the past year or so. We feel, very strongly, that our greatest support in the campaign against socialized medicine would come from such papers, were the matter to be submitted to them in the proper light. Our individual members can do yeoman service in such a campaign if they will but contact these editors and thoroughly explain the present situation. We feel confident that Indianians have made no demand for socialized medicine; we also feel that they are not cognizant of the efforts being put forth to create such a demand. Let's all get behind a campaign of education, using the rural press to the fullest extent. The editorial referred to, entitled "Helping the 'Under Dog'," follows:

Some things under our government become ridiculous when we put them together and look at them as they are. For example:

We hire a lawyer to defend a poor citizen charged with a crime; but we refuse to hire a doctor to save the life of a good citizen who has not been charged with a crime but who is not able to hire a doctor.

Is this because the lawyers have had too much influence in our legislatures and the doctors too little? Perhaps it is merely because we have not thought about the matter in its true light.

The doctor has become the "forgotten man."

We ask him, and we expect him, to go and render aid to the sick, to perform operations on the poor, to furnish medicines and bandages—and yet we make no provision to pay him for these services.

Perhaps the physicians of our communities give more donations to charity than any other citizens. They are at it almost continuously—and their acts are not published in the papers as are the names of those who give a paltry dollar to the Red Cross.

To add insult to injury, our statesmen are now talking vigorously about state medicine, by which is meant that the state shall hire our physicians and pay them a salary which shall include their attention to all those who can not afford to hire a doctor.

How simple it would be for the township or county or city or state to pay these sacrificing doctors for their services to the poor.

All children should have annual medical examinations. All persons who need operations of any kind should have them at the proper time. All persons who really need a physician should have that service, even though the state has to pay for all of it.

It is not the special duty or obligation of the doctors to perform such service. It is the duty of all citizens to see that it is rendered and that those who render it get reasonable pay for it.

The fees for such services might easily be fixed in the law. They might be made very low, but they would at least assure the physician of some pay when he renders aid to the poor. It is not fair to ask him to do it for nothing, and it is not fair to take away from him, through state medicine, the good business he has in order to render this service to the poor.

MR. MILBANK SPEAKS

(Editor's Note: At our request, Mr. Milbank prepared this summary. Complete address is to be published in March issue.)

In the address given by Mr. Albert G. Milbank, president of the Milbank Memorial Fund, before the annual conference of secretaries of the county medical societies of Indiana on January 27, he gave every evidence of a friendliness to the members of the medical profession and a sincere desire to cooperate with them in carrying out the purposes of the fund in accordance with the hopes of its founder, Mrs. Elizabeth Milbank Anderson.

In order to clear up the misunderstandings which have arisen between groups whose interests and purposes call for mutual understanding and cooperation, Mr. Milbank outlined the position of the Milbank Memorial Fund in the field of health and the relations it would like to see established between it and all other groups operating in that field in which the members of the medical profession are obviously pre-eminent.

To get a proper perspective he said that the fund was spiritually and financially the embodiment of a wise and generous woman who, fifty years ago, began a series of noteworthy gifts which continued uninterruptedly until her death in 1921, and whose carefully considered philanthropic philosophy the fund, which she established in 1905, adopted as the basis of its own policy. He spoke of Mrs. Anderson's characteristics as an individualist with a deep sense of her social obligations and as a conservative who recognized that the world does not stand still and that the cause of conservatism is best served not by an unreasoning resistance to any change whatsoever, but by a willingness to make reasonable changes in forms and procedures while preserving the sound principles which, like the eternal verities, persist because they are in fact based on truth. He pointed out that with such a tradition it would be quite out of character if the Milbank Fund would seek to undermine those foundations of the practice of medicine which have been tested and found good or to discredit the front line troops upon which everyone must rely to win the common fight for better health for the people of the United States.

He said that the question of medical economics is only one phase, although a most important one, of a larger subject which is engaging the world's attention and which involves the conflicting philosophies of individualism and socialism.

Mr. Milbank briefly described the organization of the fund, with its auxiliary committees known as its Technical Board and its Advisory Council, and stated that in matters of policy and of expenditure the sole responsibility rested with the Board of Directors which has taken no action on the subject of medical economics. He said that the staff of the fund, with the knowledge and informal approval of the directors, had been engaged in making studies in relation to this subject; that such studies were not yet complete, and therefore no final report by the staff has been made. The members of the staff had released interim reports, including tentative conclusions for the purpose of arousing discussion and criticism.

Mr. Milbank then gave his own understanding of these proposals, which do not purport to be a health insurance plan worked out in all of its administrative and financial details, and the reasons why they have seemed to him worthy of serious consideration. He spoke of the similarity between the principles embodied in these proposals as advocated by members of the fund's staff and the principles recently adopted by the American Medical Association, American Dental Association and other professional groups. He also mentioned other points where there seemed to be a general agreement should a health insurance plan ultimately be adopted. He said that his own interest in this subject was first aroused because the idea appeared to accomplish the dual purpose of promoting the health of the public and at the same time of operating for the benefit of the practicing physicians.

He frankly admitted that unless great care was taken the plan in its administration might be open to abuses that would offset, in whole or in part, the advantages which were apparent on the face of the proposals that have been advanced. He referred to the importance of avoiding the evils of bureaucracy and political influence. He said that there must be no repetition of the defects disclosed in the administration of the workmen's compensation laws, and spoke of the importance of maintaining a spirit of self-reliance and of self-respect among the insured group.

He urged, however, that the difficulties should not prevent a dispassionate consideration of the problem which in its present status leaves much to be desired. He expressed a hopeful view that the advantages could be secured and the difficulties largely minimized, if not wholly eliminated, provided the doctors themselves become wholeheartedly determined to make a plan of health insurance a success.

Mr. Milbank spoke of the number of activities of the fund which have been conducted in close cooperation and with the support of practicing physicians. He expressed the view that a foundation interested in the subject of public health can be of great benefit to the medical profession if only a basis of helpful cooperation can be established.

Reference to representation of various groups—medical, public health, nursing and others—on the Fund's Boards of Council indicated that the fund intended to go still further in this direction and was in the process of forming a medical committee

(Continued on page 111)

THE PRESIDENT'S PAGE

To be president of the Indiana State Medical Association is an honor to be coveted. However, I have become somewhat submerged with the realization of responsibility which quickly changes a halo of glory to a crown of thorns. This is especially true in these trying times.

With humble pride in the honor bestowed upon me, and with the shining examples of my illustrious predecessors who have so gloriously blazed the way to high official potentialities, I shall do my best to keep the flag flying high—at least, not allow it to drag to the earth.

PRESENT TRENDS

During the past few decades our profession has made unprecedented progress in scientific advancement, but in the meantime there has developed, insidiously, subtly, and adroitly, an American sociology which has become toxic and crippling to our body medical. The various types of cultism always have been met with an inclining ear and the sympathy of a large portion of the laity, and again much of the subtle influence which tends toward socialized medicine has found an opportune time for activity, and the vantage points have been used during these depression days, at a time when the lay mind seems to have lost its steering gear.

This intoxicated public mentality enshrouds the medical profession with a very pernicious and dangerous environment. Indeed, what else could happen? And the humiliating fact is that a considerable portion of the medical profession became ill with a kindred type of disease, namely, self-satisfied intoxication, and what ordinarily would be our vigilant antibodies of self-defense did not seem to metabolize any longer, and we became ill for want of new immunization which we alone can supply.

Thanks to better organization of our ranks and the aggressive and intelligent administration of immunizing serums, the antibodies are working, and when the body medical recovers from its environmental diseases and arrays its 150,000 strong against its social adversaries, the battle will be won, and American society, as a whole, with its acclaimed erudite intelligence, will recognize its traditional benefactor and protector, the medical profession. Today the horoscope looks much brighter, the clouds have rifted, and a tinge of blue meets our gaze. The antibodies are working and the body will recover, but for a long time we must be vigilant in order to avoid recurrences, or possibly malignant complications. I say this because our country can no longer, with the present trend of things, maintain its economic independence of other nations, and whether we like it or not, it gives us a very unfavorable outlook. Today reports come from every nation in the world extolling this or that plan of medical economics. To us, they are all very faulty, but our social workers and governmental authorities are continually looking Europeward for something to cure our weaknesses in medical economics. So many of the fantastic economic theories seem to be wholly fantastic, and not economic in the true sense of the word. We struggle with the powers and influences which surround us in order to maintain our traditional rights and standing. We no doubt will receive overtures of conciliation from those who have recently attempted to regiment the medical profession and price-list our services.

Let me remind you that before we optimistically receive a gift horse, we should carefully look deeply into his mouth, for fear that his great abdomen may be filled with glittering steel and rattling sabers. With cautious vigilance on our part, it seems quite probable that the engineers and promoters of socialized medicine may have created their own Frankenstein, because all of the desirable part of the patronage of the American profession will openly rebel against any plan which will separate its members from their favorite physicians with whom they, as liberty loving people, through the ages have had such sacred and kindred contacts and ties, born of inherent faith and confidence.

Coercive measures which may be instituted by any authority are manifestly unfair and cruel to patient and physician alike, and cannot endure in any country which makes any pretense to a democratic form of government. Naturally, the indigent and helpless will continue to be a burden to the general public. If the wealthy and philanthropically inclined would give of their means to the indigent instead of buying and paying for socialized propaganda, no one would complain.



DID YOU ATTEND THE JANUARY MEETING OF YOUR COUNTY MEDICAL SOCIETY? IF NOT, WHY NOT?

INFORMATION FOR FEDERAL INCOME TAXPAYERS, PROFESSIONAL MEN, DOCTORS, LAWYERS AND DENTISTS

BY
WILL H. SMITH
Collector of Internal Revenue, District of Indiana
INDIANAPOLIS

Income tax returns of professional persons should always be made on Form 1040, regardless of the amount of income.

Every single person (or married person not living with husband or wife) receiving a net income of $1,000 or over, must make a return of income. In such cases the fact that the individual is not liable for a tax (for example, if he is the head of a family or has dependents) does not change his liability to file a return. Married couples must file a return if their combined net income amounts to or exceeds $2,500, or their combined gross income is in excess of $5,000.

Under the 1934 Law there is an earned income credit of 10 per cent of earned income. All income not to exceed $3,000 is considered as earned regardless of source. Earned income can not exceed $14,000, or the most credit which can be taken on any income in excess of that amount is $1,400. All professional fees are considered as earned income if the taxpayer is engaged in a professional occupation even though he employs assistants who perform part or all of the services, provided the clients or patients are those of the taxpayer and he is responsible for the services performed.

ALLOWABLE DEDUCTIONS

Deductions may be made for all expenses incurred in the pursuit of his profession by a professional man.

Office Rent

When a professional man uses space in his residence for his office the rental value of the space in his residence occupied by him for his office, if he actually pays rent, may be deducted for the rooms so occupied. Also that proportion of the light and heat expense may be deducted. If a domestic servant is employed in his home and a portion of the time is given by the servant in taking care of his professional office, that portion of the salary of such employee may be taken as a business expense.

Depreciation of Property

If a professional person owns his own home and uses a portion of it for his office, such portion of the property is subject to depreciation as business expense. If a professional man, such as a doctor, only has occasional calls by his clients or patients at his home, no expense can be claimed for rent, heat, or depreciation. If an automobile is used exclusively in pursuit of his profession, the entire amount of operating expense of such automobile, plus depreciation, may be taken. If the automobile is used partly for business and partly for pleasure, the portion of the upkeep and depreciation applicable to business may be deducted as business expense.

Expenses

Expenses of a professional man in securing admission to practice his profession is considered capital expenditures and may not be deducted. Depreciation on office furniture and equipment of a professional man is an allowable deduction. Membership in Medical or Technical Societies, Trade Associations, etc., used as a means of advancing the business interests of the taxpayer, and dues paid to such organizations are deductible as a business expense, but dues paid by professional men for membership in social or athletic clubs would not be deductible. However, tax paid on club dues is an allowable deduction, even though the dues are not deductible. Subscriptions to technical magazines and trade journals used in furthering business interests are allowable as business expense.

Railroad fare and hotel bills incurred by a doctor attending a medical convention is a deductible business expense. The expense is also deductible in the case of a college professor while attending meetings of scientific societies. Expenses of a physician taking a post-graduate course are personal expenses and are not allowed as business expense.

Under the Revenue Act of 1934, there must be included in income recovered by insurance annuities for each taxable year, 3 per cent of the cost of such annuities.

PROPER BLANKS

Blanks have been mailed to all taxpayers of record, and for the sake of economy, individuals are urged to use those blanks mailed to them. If you have not received your blanks, they will be furnished immediately upon request to this office. Taxpayers not of record are urged to carefully figure their net and gross income to determine if they are liable for filing.

RETURNS MUST BE FILED MARCH 15, 1935

Midnight of March 15th is the final minute to file returns without penalty, and taxpayers are urged to file immediately their completed returns. Delay results in delinquent filing and additional expense. Read carefully the instructions on the blank, and then if taxpayers are in need of assistance, write a letter to this office and full instructions will be cheerfully given.

INDIANA MEDICINE IN RETROSPECT

L. G. Zerfas, M. D., Historian, Indiana State Medical Association

THE INFLUENCE OF TRANSYLVANIA UNIVERSITY

The transplantation of medicine from the centers of learning in Europe to the Colonies in America and its gradual filtration to the various pioneer settlements in the West forms an interesting chapter in the history of medicine.



Dr. Samuel Brown
1769-1830

No medical school of note existed within the boundary lines of the State of Indiana prior to the formation of the Indiana Medical College at LaPorte in 1842. Provision had been made in the charter of Vincennes University, in 1807, for a medical department, but such a department did not materialize. Physicians practicing medicine in the territory and state during the period from 1800 to 1842 who had attended medical lectures or who had received medical degrees constituted a noticeably small minority of the total. The majority were either trained by preceptorship, or were self-instructed, self-styled physicians. A medical degree could be obtained only in the schools of other states, chiefly beyond the mountains. With transportation difficult, money scarce, and secondary education advantages poor, the native born who desired medical degrees were practically compelled to attend the medical lectures nearest home.

Not many miles distant there existed the first medical school founded in the vast valley of the Mississippi and the first west of the Allegheny Mountains—the medical department of Transylvania University at Lexington, Kentucky. This institution afforded medical instruction for many persons who later settled in the state. It seems proper, therefore, that a brief history of the medical department be given and cognizance taken of the illustrious members of the medical faculty, in order to appreciate their influence on medicine in Indiana.

Early in 1799 the trustees instituted the medical department. Dr. Samuel Brown was appointed professor of chemistry, anatomy, and surgery, and Dr. Frederick Ridgely, professor of materia medica, midwifery, and the practice of physic.

Dr. Brown, the first professor of medicine at Transylvania, was born in Rockbridge County, Virginia, on January 30, 1769. He was the son of the Rev. John Brown, a Presbyterian minister of great learning and piety, and of Margaret Preston, a woman of remarkable energy, character, and vigor of mind. He graduated at Carlisle College, Pennsylvania, and later studied medicine for two years at the University of Edinburgh, Scotland, and finally received his degree from the University of Aberdeen. He was a classmate of the celebrated Dr. Ephraim McDowell, of Danville, Kentucky, the first to perform the operation of oophorectomy. Upon the return of Dr. Brown to America, he commenced the practice of medicine in Bladensburg, Maryland, but removed soon after to Lexington, Kentucky, to accept the appointment previously mentioned. In 1806 he moved to Fort Adams, Mississippi, but returned in 1819 and was reappointed to the chair of medicine. He now became a colleague of Professors Benjamin W. Dudley, Charles Caldwell, Daniel Drake, William Richardson, and James Blythe. He left Kentucky in 1825 and died at Huntsville, Alabama, in 1830.

Dr. Robert Peter, in his history of the medical department of Transylvania, informs us that "Dr. Brown was a man of fine personal appearance and manners; an accomplished scholar, gifted with a natural eloquence and humor that made him one of the most fascinating lecturers of his day. Learned in many branches, he was an enthusiast in his own profession, scrupulous in regard to etiquette and exceedingly benevolent and liberal of his time and services to the poor." Dr. Brown contributed to the fourth volume of the *American Medical Repository* (June, 1799) the first medical article from the pen of a Kentucky physician. Doubtless this was also the first medical article published by a physician of the western country.

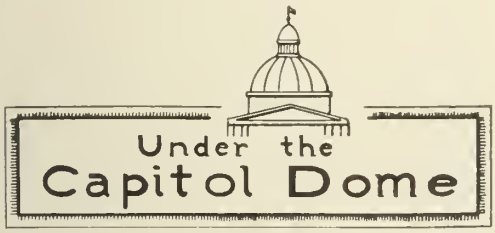


Main Building of Transylvania University, Burned in 1829

Dr. Peter states: "To him we are indebted for the first introduction in the West of the prophylactic use of the cowpox. As early as 1802 he had vaccinated upwards of five hundred persons, when in New York and Philadelphia physicians were only just making their first experimental attempts. The virus he used was taken from its original source, the teats of the cow, and used in Lexington even before Jenner could gain the confidence of the people of his own country."

Dr. Brown interested himself in the nitre caves of Kentucky, and, in the winter of 1806, made a long, perilous journey on horseback to Philadelphia to present a paper before the American Philo-

sophical Society, entitled "A Description of a Cave on Crooked Creek with Remarks and Observations on Nitre and Gunpowder." The compound, nitre, was employed in the manufacture of gunpowder, which was so essential in the pioneer days of the West. Besides his duties as physician, teacher, and investigator, he found time to carry on an extensive correspondence with such famous men as Benjamin Rush, Thomas Jefferson. and others, both at home and abroad.



OFFICERS OF MEDICAL REGISTRATION BOARD

Officers of the Indiana State Board of Medical Registration and Examination all were re-elected at the board's annual meeting January eighth. The officers are: J. W. Bowers, M. D., of Fort Wayne, president; Leslie C. Sammons, M. D., of Shelbyville, vice-president; William R. Davidson, M. D., of Evansville, secretary, and C. J. VanTilburg, D. C., of Indianapolis, treasurer. Other members of the board are F. S. Crockett, M. D., of Lafayette; N. E. Harold, M. D., of Indianapolis, and Earl O. Peterson, D. O., of LaPorte.

The next meeting of the State Board of Medical Registration and Examination will probably be held late in March, but no definite date has been set. The meeting will be a continued session of the January meeting. The January meeting was not adjourned, but only recessed, so that any action taken at the March meeting will be a part of the record of the January one.

* * *

RECIPROCITY WITH ILLINOIS

A plan re-establishing reciprocity for medical licenses between Indiana and Illinois was ratified by the Indiana State Board of Medical Registration and Examination at its annual meeting January eighth. Illinois requires a clinical examination be taken by Indiana licensees, and, according to the reciprocity agreement, Illinois applicants for licenses in this state will be required to take such an examination at the Indiana University hospitals.

The first clinical examination was given January ninth. Three or four additional examinations will be given during the year. Dates have not been decided upon for the latter examinations.

The following resolution relative to clinical examinations was adopted by the medical board:

"WHEREAS, the Indiana University hospitals have granted the board permission of the use of the wards for practical clinical examinations in cases of reciprocity license; therefore, be it

"RESOLVED, That in case of application for reciprocity license to practice medicine with a state wherein such clinical examination is imposed, this board conduct a clinical examination of like character as taken in said state, before such application for reciprocity license to practice medicine is granted.

"RESOLVED, That an additional charge of ten ($10.00) dollars be made to said applicant in cases of clinical examination for reciprocity license to practice medicine to cover expense of such examination."

This resolution, it was pointed out, would apply not only to applicants from Illinois, but to applicants from any other state which requires a clinical examination of Indiana licensees seeking reciprocity licenses.

* * *

CERTIFICATES FOR DENTISTS

Philip Lutz, Jr., attorney general, has ruled that the State Board of Dental Examiners may not issue Indiana certificates without an examination to an applicant holding a certificate from the National Board of Dental Examiners, without an amendment to the present law on this subject.

The State Board of Medical Registration and Examination has before it a somewhat similar question in connection with accepting certificates from the National Board of Medical Examiners, located in Philadelphia. The board has taken no action on this question as yet, but may do so at the next meeting. An opinion from the attorney general has been requested by the medical board.

* * *

PRACTICING WITHOUT LICENSE

Frank T. Massey of Indianapolis was cited to appear before the State Board of Medical Registration and Examination to answer a charge of practicing medicine without an Indiana license, at the board's meeting January eighth.

Mr. Massey received a license to practice in the state of Pennsylvania in 1892, but never obtained an Indiana license, it was charged. He had been instructed previously by the board to stop practicing, but had disregarded the instruction.

The board warned Mr. Massey either to take immediate steps to obtain an Indiana license or discontinue practice.

DIPTHERIA REPORT FOR DECEMBER, 1934 AND FOR THE YEAR 1934

We are both pleased and disappointed with the diphtheria report for the year of 1934. We are pleased because there were fewer deaths from diphtheria than ever before in the history of the state, the total for December being twenty-eight under that for 1933, and fifty-two under the total for 1932. The smallest number previously recorded was in 1930 and 1931, in each year of which there were 137 deaths. On the other hand, we are disappointed that the number is as high as it is. We had very much hoped that we might get through this year without passing the one hundred mark.

In analyzing the figures we find that Henry County had three deaths for December, being the first reported during the year. Lawrence County had two deaths, bringing their total up to eleven, an exceedingly large number for a county of that size. Marion County with four deaths for the month of December had a total of seventeen deaths for the entire year, which is higher than Marion County has had for the past two or three years.

A list of the counties of the state, giving the number of deaths for the month of December, 1934, for the year of 1934, and the rate for the year of 1934, is given below.

County	December 1934	Total for 1934	Rate for 1934 Per 100,000 Pop.
Adams	0	0	0
Allen	1	8	5.1
Bartholomew	0	2	7.9
Benton	0	0	0
Blackford	1	2	14.6
Boone	0	0	0
Brown	0	0	0
Carroll	1	1	6.6
Cass	1	2	5.7
Clark	0	0	0
Clay	0	0	0
Clinton	0	0	0
Crawford	1	2	19.6
Daviess	1	1	3.8
Dearborn	1	1	4.6
Decatur	0	2	11.5
DeKalb	0	0	0
Delaware	2	6	8.6
Dubois	0	2	9.6
Elkhart	0	0	0
Fayette	0	1	5.0
Floyd	0	2	5.6
Fountain	0	0	0
Franklin	0	0	0
Fulton	0	0	0
Gibson	0	1	3.4
Grant	0	2	3.9
Greene	1	4	12.7
Hamilton	0	0	0
Hancock	0	0	0
Harrison	0	1	5.7
Hendricks	0	0	0
Henry	3	3	8.4
Howard	0	1	2.1
Huntington	0	0	0
Jackson	0	3	12.6
Jasper	0	2	14.9
Jay	0	0	0
Jefferson	0	0	0
Jennings	0	0	0
Johnson	0	0	0
Knox	0	4	9.1
Kosciusko	0	0	0
LaGrange	0	0	0
Lake	0	5	1.7
LaPorte	0	0	0
Lawrence	2	11	29.5
Madison	1	1	1.1
Marion	4	17	3.8
Marshall	0	1	3.9
Martin	0	1	9.8
Miami	0	0	0
Monroe	0	1	2.5
Montgomery	0	1	3.7
Morgan	0	0	0
Newton	0	2	20.3
Noble	0	0	0
Ohio	0	0	0
Orange	0	0	0
Owen	0	0	0
Parke	0	0	0
Perry	0	4	24.0
Pike	0	0	0
Porter	0	0	0
Posey	0	0	0
Pulaski	0	0	0
Putnam	0	0	0
Randolph	0	2	8.0
Ripley	0	1	5.5
Rush	0	1	5.1
Scott	0	0	0
Shelby	0	2	7.4
Spencer	0	2	11.9
Starke	0	0	0
Steuben	0	0	0
St. Joseph	0	1	0.5
Sullivan	0	0	0
Switzerland	1	1	11.8
Tippecanoe	1	2	4.1
Tipton	0	0	0
Union	0	0	0
Vanderburgh	0	4	3.3
Vermillion	0	1	4.3
Vigo	1	1	1.0
Wabash	0	0	0
Warren	0	0	0
Warrick	0	1	5.4
Washington	1	1	6.1
Wayne	0	3	5.3
Wells	0	0	0
White	0	0	0
Whitley	0	0	0
Total	24	120	3.6

Thurman B. Rice, M. D., Chairman,
Diphtheria Prevention Committee.

SECRETARIES' COLUMN

I am glad so many of you attended the Secretaries' Conference. These meetings are surely worth while.

The legislature is now in session. A so-called "model" bill for Health Insurance, prepared by the American Association for Social Security, has been sent to 43 legislatures now in session. Some one in the legislature at Indianapolis has this bill. Whether it will be presented, I do not know. You should see your Senator and Representative and tell them you are against it.

This bill contains cash benefits and pay for the doctor. Two separate boards are to administer the provisions of this bill. Any doctor who wants to do this work can do so. The money for this comes from the employee, employer, and taxation. This bill, if passed, would be a political football. It is now up to each secretary to get busy. You either do your duty now—or else!

If you want any more information on this subject consult the headquarters office in Indianapolis.

Have you arranged your county society programs to include scientific subjects, economic subjects, all given by your local members? And have you arranged for some out of town speakers? You know a dinner meeting now and then helps your morale.

The Indiana Plan for health is working nicely. This plan puts the education of the laity on health subjects into the hands of the county medical societies.

Are you putting on any health talks on the radio? Are you giving talks to the parent-teacher organizations, the Rotary, the Kiwanis, and other social clubs?

You should contact them and offer your services. Supply speakers from your local society if possible. If this can not be done write headquarters office in Indianapolis. They will see that a speaker is supplied.

Mr. Secretary, you must always remember, "The care of the health of the people, both preventive and curative, belongs to the doctor. If he does not accept this responsibility, then someone else will." This explains the attitude of the social worker today.

A. M. MITCHELL, M. D.,
Chairman.

MEDICO-LEGAL DEPARTMENT

BY
ALBERT STUMP
ATTORNEY FOR THE INDIANA STATE MEDICAL ASSOCIATION

QUESTION: What is the law concerning the power of County Commissioners to disallow, in part, claims for aid furnished the poor on order of the township trustee as overseer of the poor?

ANSWER: It has been the general practice for claims for aid furnished the poor to be filed with the county auditor, and for the same to be passed upon and allowed by the county commissioners. It has also been quite common practice for the county commissioners to allow the claim in part only. It has been pointed out in previous articles that such practice had no foundation in law, and was not authorized under our statutes.

Prior to 1901, poor relief was solely a county function and duty. Since that time it has been administered by the county as to persons within county institutions, and by the townships as to persons not in county institutions. The duty is imposed upon the overseer of the poor in each township to properly relieve all poor persons according to law. (Section 12260, Burns 1926.) The township trustee is the overseer of the poor in each township. (Section 12258, Burns 1926.) The only provision in the statutes, where the trustee must submit relief cases to the county commissioners is where he has expended the sum of $15.00, and further aid is necessary; and this does not apply to burial, medical relief, or assistance to children under the compulsory education law, since they are specifically exempted from the operation of the statute. (Section 12266.) Cases coming within the province of that statute can be rendered further aid upon authorization of the county commissioners.

Even that statute does not operate to deprive persons who in good faith have furnished aid on proper order of the trustee in excess of $15.00 of the right to be paid according to their contract with the trustee, and the liability for the payment in excess falls upon the trustee. (Wayne Twp. v. Brown, 186 N. E. 841.) The right of all persons to recover from the township for the aid, services, or assistance furnished by them is the same, but for excess payment in the three classes exempted from the operation of Section 12266, Burns 1926, the trustee incurs no personal liability.

The township has the duty to care for the poor; and by its proper officer to make contracts to provide that care, which, in regard to medical care, should be by the individual case; and by its proper officers to levy taxes to provide money to pay for services rendered on such contracts; and by its proper officer to receive advancement from the general fund of the county treasury to pay for such services; and by its proper officer to pay for

the aid, relief, and services rendered on the order of such officer. The trustee having made an order for the aid, relief and services to the poor, which was delivered or rendered, a valid contract exists under which the township is obligated to pay; and failing payment by the trustee the party so delivering or rendering may sue and obtain judgment against the township for the amount of the contract price.

In the case of Wayne Twp. v. Brown, supra, decided by the Supreme Court in September, 1933, the court said:

> "It is not the duty of the Board of Commissioners to pass upon and allow each claim held by those who have given help to the poor on a proper order of the trustee, nor the duty of the county auditor to draw his warrant therefor. It is the duty, however, for the Board of Commissioners to advance the necessary money to the trustee for the relief of the poor upon a proper showing made by him, and it is then up to him to make the payment to the proper persons. As stated above, we concede that this has not been the method pursued for many years. It may not be the best method, and if not then it is up to the legislature to prescribe a procedure. It is not for this court to enter the field of legislation. We are only concerned with the law as we find it."

The law is then, that the county commissioners have no power to pass or allow any claim against the township, nor to reduce the amount of any claim, where the aid, relief, or services were given or rendered on a proper order of the trustee creating a valid and legal contract with the township.

VOICE OF MEDICINE

THE CLIQUE MENACE

To the Editor:

The medical profession has advanced only and whenever the critical faculty of the members at large has been free, alive and unpolluted. It slumps whenever it is intimidated or suppressed. In many quarters, both regional and local, tyrants and their satellites have banded into groups and developed a ramifying propaganda subtly designed to control thought and opinion. Malice and slander are nurtured at secret conferences and then allowed gently but surely to flow among the laity where it can do its dirty work. Critics of these methods are smeared with personal attacks upon character or motive, not answered by sober argument. This is "managed opinion" and is the back door to repression of free thought. Our forefathers formulated a Bill of Rights. Why cannot the humanitarian and Christian spirit enter into the medical profession as a whole with a right for each one of us to diagnose a case where our predecessor failed, without being condemned for so doing?

When group government of hospital staffs begins with the formation of a body of "yes" men under the dictatorship of an irresponsible and power-thirsty tyrant, then liberty takes flight for all who strive for community welfare and individual progress. Human rights instantly clash. Confidence in the future vanishes. The success of those rogues responsible means further drive for power—more power and arrogance. Our society cannot be part dictatorial and part democratic; it must be the one or the other.

Anyone can see that in a clique of this character there are three implacable spirits—self-perpetuation, expansion and demand for more power. These are the urges for those who care not for the other fellow and they cannot permit a disintegration of their group for fear of all being found out. These spirits brood the dictatorial complex and lead to subversive influence on younger physicians who may come in contact with them. The new practitioner should be encouraged in the light of honesty and integrity and helped to see the nobler side of his life work. He should refuse definitely to be swallowed up in the regimentation of those who would blight his outlook on his profession in a few months or years by deceit and treachery.

Some cliques excuse their nefarious practice by stating that their regimentations are merely extended cooperation. Perhaps—? It is the extended cooperation which a Dillinger would expect from his pals or a Hauptmann would expect from his helpers. As long as his political support holds, a bureaucrat is above accountability. True cooperation gives slower results than coercion, but it is more permanent, tends to lasting peace and harmony, is the spiritual uplift of a gentleman and does not atrophy the character of a physician. Is it morally or legally right that these "apostolic chekas" and "holier than thou" groups should be permitted to apply the brakes to honest and ethical practice? Two points are in our favor, however: these types have grown too shrewd to be sincere and the rest of us have grown too wise to trust them.

Can someone name the remedy? Whatever it may be it will cause dissension and disagreements. But truth and justice should prevail. It will depend on the firm will of each one of us, on the persistence of our memories and, above all, the duty we owe to our families, each other and to the public at large. Today is but yesterday's younger brother, and while we may let us discover a better understanding leading to a better world of conditions in which to enjoy life while there is yet time—always remembering that "it is later than you think."

WALTER S. POLLARD, M. D.,
Evansville.

ANESTHETICS

To the Editor:

The Journal in the past few months has carried several editorial references to a ruling of the State Board of Medical Registration and Examination to the effect that anesthetics may be given by licensed physicians only. Without exception, so far as I have noted, the editorial comment has always upheld the justice of this ruling, and has urged its general observance by the profession. To emphasize this statement, I quote the first sentence from a paragraph in "Editorial Notes" in The Journal of January 1, 1935, page 34, as follows:

> "We are advised that some of our hospitals are a bit dilatory about making provisions for anesthetists. It should be remembered that the State Board of Medical Registration and Examination has ruled, and the ruling has been upheld, that anesthetics must be administered by licensed physicians."

If the ruling quoted verbatim above is accurately stated, it of course means that all anesthetics given in or out of hospitals, and whether local or general, must be given by licensed physicians only. This means, for example, that an obstetric anesthetic given in a home must be given by a licensed doctor, and likewise all dentists would be compelled to have a physician give their anesthetics, both local and general. Certain exceptions for emergencies might be made, but none are noted; but in this day of prenatal care, an obstetrical case could scarcely be called an emergency. Many surgeons prefer to use certain basal anesthetics alone or in combination. Since avertin is an anesthetic and is given as an enema, this ruling would require that a licensed physician give the avertin enema.

It should be further noted that all internes in hospitals are not licensed at the time of beginning their service. This ruling would prevent their giving anesthetics. It is true that many internes have had very little experience in giving anesthetics and should be supervised in this work. Others, however, who are qualified should be allowed to give anesthetics.

In fact, all will agree that as a rule anesthetics should be given only by competent, trained anesthetists, whether a graduate in medicine or not. But since the doctor in charge of the patient is the one who is responsible for his care, he should be allowed to use his own judgment in choosing the anesthetist. One should also remember that in the hospitals in Rochester, Minnesota, and in the Cleveland Clinic Hospital and at many other outstanding surgical clinics, trained anesthetists who are not graduates in medicine are employed, the only requirement being that they be competent.

At the Cleveland meeting of the American Medical Association the past summer, an attempt was made to have the House of Delegates approve a resolution limiting the giving of anesthetics by anyone except a physician. This resolution was defeated. As a matter of fact, I was the only delegate to appear before the reference committee to speak against the approval of the resolution. Attempts to pass such legislation through the legislatures of New York and of Massachusetts within the past year have failed. It has been shown that such legislation would act only in increasing the cost of medical care without benefit to patient or doctor, excepting only those doctors, the major part of whose income is derived from giving anesthetics.

Great tribute is due those doctors who are professional anesthetists and who take pride in their work. Their ability in this line is quickly realized and their services are rightly in great demand. But this is due to the fact that they actually do give better anesthetics than the average. This again is due to their training and interest and pride in anesthesia and is not due to the fact that they are graduates in medicine.

I have spoken to a great many members of our Indiana State Medical Association to ascertain their views regarding this ruling. With very few exceptions they are opposed to it. Now is the time for those doctors and dentists who are responsible for their patients' care and who still prefer to have the privilege of choosing their own anesthetists if they wish, to make themselves heard. It is a subject which should be considered especially by those doctors in the rural districts where such a ruling would work an undue hardship on both doctor and patient. Those who are so inclined should speak to their representatives in the legislature to prevent any official action being taken to validate this ruling.

D. F. Cameron, M. D.,
Fort Wayne, Indiana.

DEATH NOTICES

Thomas D. Keckich, M. D., Gary eye, ear, nose and throat specialist, died January ninth, aged thirty-six years. Death resulted from pneumonia. Dr. Keckich graduated from Rush Medical College in 1926. He served in France during the World War, and was active in the American Legion and various civic organizations. He was a member of the Lake County Medical Society, the Indiana State Medical Association and the American Medical Association.

Stephen B. Elrod, M. D., of Henryville, died January ninth in a Louisville hospital. Dr. Elrod was sixty-one years of age. He was a veteran of the World War, during which he served in France. Dr. Elrod graduated from the Hospital College of Medicine, Louisville, in 1898, and was a member of the Clark County Medical Society, the Indiana State Medical Association and the American Medical Association.

J. M. REYNOLDS, M. D., of Memphis, died January eighth, following a long illness. Dr. Reynolds' entire life was spent in the practice of medicine in and near Memphis. He was eighty-four years of age. Dr. Reynolds graduated from Bellevue Hospital Medical College, New York, in 1885, and was a member of the Clark County Medical Society, the Indiana State Medical Association and the American Medical Association.

J. C. KNIGHT, M. D., of Jonesboro, died December twenty-seventh, aged seventy-eight years. Dr. Knight had served as a member of the Indiana legislature in 1929 and 1931. He graduated from the Kentucky School of Medicine, Louisville, in 1881, and was a member of the Grant County Medical Society, the Indiana State Medical Association and the American Medical Association.

CARL F. PAYNE, M. D., of Franklin, died January twentieth, aged seventy-one years. Dr. Payne had practiced in Franklin for a period of forty-six years. He was a graduate of Jefferson Medical College of Philadelphia in 1888 and in 1933 he was given the honorary doctor of science degree from Franklin College.

L. O. WILLIAMS, M. D., of Anderson, died January seventeenth, aged eighty-one years. Dr. Williams graduated from the Medical College of Indiana, Indianapolis, in 1895.

L. T. LOAR, M. D., of Gary, died January sixteenth, aged seventy-four years. Dr. Loar had retired from active practice. He was a graduate of the Louisville Medical College, Louisville, Kentucky, in 1891.

O. I. HETSLER, M. D., of Blountsville, aged sixty-three years, died January nineteenth. Dr. Hetsler was a graduate of the Eclectic Medical College, Cincinnati, in 1896. He was a member of the Henry County Medical Society, the Indiana State Medical Association and the American Medical Association.

CHESTER C. FUNK, M. D., of New Albany, died January twenty-second, aged fifty-four years. Dr. Funk had served as secretary of his local board of health. He was a graduate of the University of Louisville School of Medicine in 1903 and was a member of the Floyd County Medical Society, the Indiana State Medical Association and the American Medical Association.

HOOSIER NOTES

DR. L. E. SHAVER of Brownstown is the new coroner for Jackson County.

DR. L. W. PAYNTER of Salem has been made coroner for Washington County.

DR. CLIFFORD C. TAYLOR is now associated with Dr. Lester A. Smith in Indianapolis.

DR. H. O. BRUGGEMAN of Fort Wayne has been elected president of the St. Joseph's Hospital staff.

MISS RUTH L. GYGI, of South Bend, and Dr. H. J. Zimmer, of Mishawaka, were married January sixteenth.

DR. MAYNARD POLAND of Indianapolis has moved to Bloomington where he will conduct a surgical practice.

DR. OTT CASEY of Clinton and Mrs. Rosa Storm of Chicago were married in Chicago, December twenty-sixth.

DR. H. W. SMELSER of Connersville has been made health commissioner for the city and for Fayette County.

DR. CHARLES E. THORNE of Vincennes has opened an office in Newcastle, where he will conduct a general practice.

DR. D. D. JONES, health officer of Berne for a period of twenty-three years, has been succeeded by Dr. Myron Habegger.

THE sixth tuberculosis clinic conducted by the Shelby County Medical Society was held in Shelbyville, December twentieth.

DR. HOUSTON SHAW of Cincinnati, Ohio, has announced that he will move to Corydon, where he will conduct a general practice.

MISS BETTY RAMEY of Indianapolis and Dr. Robert H. Wiseheart of North Salem were married in Indianapolis, January fifth.

DR. WILL J. NORTON of Columbus has been named to serve as secretary of the board of health, succeeding Dr. Omer Wooldridge.

DR. ADAH MCMAHAN of Lafayette suffered a fractured hip December twenty-second, when she slipped and fell while making a call.

NEW city appointees for Fort Wayne include for the board of health Dr. Karl C. Eberly, secretary, Dr. Joseph C. Lill and Dr. Lynn W. Elston.

DR. NORMAN E. BECKES has been made secretary of the Vincennes City Board of Health to serve with Dr. J. W. Smadel and Noel Swayze.

DR. C. H. MARCHANT of Bloomington has moved his office from 214 South Walnut Street to larger quarters at 119 West Fourth Street, in Bloomington.

MEMBERS of the Carroll County Medical Society have voted to close their offices on Wednesday afternoons and evenings throughout the entire year.

DR. E. B. MOSER of Windfall received a fractured rib and various cuts and bruises, when his automobile skidded on an icy road, December thirty-first.

DR. O. H. WISEHEART, of North Salem, is remodeling his office. His son, Dr. Robert H. Wiseheart, a recent medical graduate, is associated with his father.

DR. E. B. GALL of Lima, Ohio, has opened an office in Holton, where he will conduct a general practice. Holton has been without a physician recently.

DR. WILLIAM T. FISHER has purchased property in Paoli where he expects to conduct a general practice. Dr. Fisher is a retired army physician and surgeon.

DR. LEE KERRIGAN has been made president of the Michigan City Board of Health. Dr. Harry L. Brooks was made vice-president, and Dr. Norman Carlson, secretary.

DR. LEWIS STEPHEN PILCHER, editor for half a century of the oldest surgical journal in the United States, the *Annals of Surgery*, died December 24, 1934, at eighty-nine years of age.

DR. FRANK J. MCMICHAEL of Gary has been made staff president of the Gary Methodist Hospital. Dr. H. J. Ryan is the new secretary, and Dr. I. J. Propper the new treasurer.

DR. LAWRENCE SHINABERRY has been made president of a new organization, the Fort Wayne Academy of Medicine and Surgery. Other officers are Dr. R. W. Wilkins, vice-president, and Dr. C. B. Parker, secretary.

THE Marion County Tuberculosis Association has received an anonymous donation of $50,000 to aid in the enlargement and maintenance of its Nutrition Camp for Sick Children, near Bridgeport. The camp was established in 1928.

THE Southeastern Surgical Congress will hold its sixth annual assembly in Jacksonville, Florida, March 11, 12 and 13, 1935. Information concerning the meeting may be obtained from Dr. B. T. Beasley, 1019 Doctors Building, Atlanta, Georgia.

A SPECIAL program of lectures and demonstrations in medicine will be held under the direction of the Mayo Foundation, March 4 to 8, inclusive. Programs are arranged primarily for the Fellows of the Foundation, but visiting physicians are invited to attend.

THE new mayor of Muncie has appointed Dr. Jules F. LaDuron to serve as secretary of the Muncie Board of Health. Other members of the board will be Dr. J. C. Davis (colored) and Mrs. P. Young, who is Democratic chairwoman of Delaware County.

DR. and MRS. C. O. MCCORMICK and sons, Charles O., Jr., and Gene, of Indianapolis, spent the holidays cruising for ten days on the Empress of Britain among the West Indies. Upon return they were pleasantly detained for forty-eight hours in New York harbor because of fog.

THE American Board of Ophthalmology will conduct examinations in Philadelphia, June 8, and in New York, June 10. Applications must be filed sixty days before date of examination. Further information may be obtained from Dr. William H. Wilder, 122 South Michigan Avenue, Chicago.

DR. G. H. KAMMAN has moved his offices in Seymour from the Heideman building, where he has been located for more than thirty-four years, to the offices formerly occupied by the late Dr. J. M. Shields in the Vehslage building. Dr. Kamman has been made secretary of the city board of health to succeed Dr. Shields.

AT THE annual convention of the Radiological Society of North America, held at Memphis, Tennessee, in December, Dr. L. F. Fisher of South Bend presented an exhibit on "Intestinal Diverticulosis" and Lester A. Smith of Indianapolis presented exhibits on "Bone and Joint Lesions Due to Myelodysplasia of Spinal Cord" and "Xanthomatosis Involving Bone." Dr. Smith also presented a paper on the latter subject.

THE United States Civil Service Commission has announced open competitive examination for Junior Medical Officer (Interne) for St. Elizabeth's Hospital, Washington, D. C., applications for which must be on file with the Manager of the Fourth U. S. Civil Service District, Washington, D. C., not later than February 18, 1935. Applicants must have graduated from a medical school of Class A standing with the degree of doctor of medicine. Full information may be obtained from the Secretary of the U. S. Civil Service Commission, Washington, D. C.

THE United States Civil Service Commission has announced open competitive examinations for Principal Pharmacologist, Senior Pharmacologist, Pharmacologist, Associate Pharmacologist, and Assistant Pharmacologist. Applications for the positions named above, for employment under the Food and Drug Administration, Department of Agriculture, must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than March 11, 1935. Complete information may be obtained from the Secretary of the United States Civil Service Commission, Washington, D. C.

DIRECTORS of the Indianapolis Deaconess Hospital have announced closing of the institution for the reason that it was deemed unwise to incur added obligations. Outstanding debts are said to be more than covered by money due. The hospital was established at Senate Avenue and Ohio Street in 1898, was reorganized in August, 1932, when the name was changed to the Indiana Christian Hospital and Clinic, and in December, 1933, it again became the Deaconess Hospital and Clinic. Grover D. Gise, manager of the hospital for several years, will act as liquidating agent.

In addition to the articles already enumerated the following have been accepted by The Council on Pharmacy and Chemistry of the American Medical Association:

Grisard Laboratories
  Chocolate Coated Tablets Scillonin, 0.5 mg.
Lederle Laboratories, Inc.
  Diphtheria Toxin for Schick Test in Peptone Solution, 50 test package.
  Staphylococcus Toxoid.
Eli Lilly & Co.
  Ampoules Sodium Amytal, 0.065 gm. (1 grain).
  Tablets Amytal, 1/8 grain.
National Drug Company
  Diluted Diphtheria Toxoid for Sensitivity Test, 5 and 50 test packages.
Winthrop Chemical Co., Inc.
  Tablets Skiodan, 1 gm.

The following products have been accepted for inclusion in the List of Articles and Brands Accepted by the Council but Not Described in the N. N. R. (New and Non-official Remedies, 1934, p. 443):

Lederle Laboratories, Inc.
  Quinidine Sulphate (Lederle)
    Capsules Quinidine Sulphate (Lederle), 3 grains (0.2 gm.).
    Capsules Quinidine Sulphate (Lederle), 5 grains (0.325 gm.).

INDIANA UNIVERSITY NEWS NOTES

Dr. D. O. Kearby has been named head of the newly-created department of bronchoscopy and esophogoscopy of the Indiana University School of Medicine. Dr. Carl H. McCaskey has been appointed head of the otolaryngology department of the I. U. Medical School to succeed Dr. John W. Carmack, who was killed in an airplane crash at Richmond during the early part of December. Dr. McCaskey became a member of the otolaryngology department in 1915. He is chief of the staff of otolaryngology at the Indianapolis City Hospital and is president-elect of the Marion County Medical Society.

Dr. Kearby is the author of many papers dealing with his specialty and has been in charge of the clinic of bronchoscopy and esophogoscopy at the James Whitcomb Riley Hospital since its establishment in 1928.

Mrs. Fred Hoke, of Indianapolis, has presented to the Indiana University Medical Museum several articles commemorative of her father, Dr. Arbaces Cushman, of Graysville. The medical museum has been established at the university's medical center on West Michigan Street, Indianapolis, with the cooperation of the Indiana State Medical Association.

Articles presented to the museum by Mrs. Hoke include a hypodermic syringe of a style not often seen in the present day, three large volumes of office records which cover the period from 1874 to 1889, and show, among other curious facts, that payment for medical services at that time and place were made sometimes in such commodities as corn, hay, and other farm produce. Dr. Cushman was a graduate of the Jefferson Medical College, Philadelphia, in the class of 1868, and practiced his profession at Graysville, Sullivan County, until his death in 1908.

Other recent gifts to the museum include 33 volumes of medical books from Miss Emma Schmidt, of Indianapolis; 28 volumes from Dr. Robert Dearmin, also of Indianapolis; and a copy of the 1878 Transactions of the Indiana Medical Association from Dr. D. L. Phipps, of Whiteland.

Dean W. D. Gatch and Dean B. D. Myers, of the Indiana University School of Medicine, spoke before the December meeting of the Skeleton Club, an organization of medical students in the Bloomington division of the I. U. Medical School. Other talks were given by Dr. William J. Moenkhaus and Dr. J. A. Baderstcher, both professors in the medical school.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION
THE COUNCIL

The annual midwinter meeting of the Council of the Indiana State Medical Association was called to order by Dr. O. O. Alexander, chairman, of Terre Haute, at 10:45 a. m., Sunday, January 13, 1935, in Parlor E, fifth floor, of the Indianapolis Athletic Club, Indianapolis. Roll call showed the following present:

Members of the Council—

First District—I. C. Barclay, Evansville.
Second District—H. C. Wadsworth, Washington.
Third District—H. C. Ragsdale, Bedford.
Fourth District—H. P. Graessle, Seymour.
Fifth District—O. O. Alexander, Terre Haute.
Sixth District—Samuel Kennedy, Shelbyville.
Seventh District—Not represented.
Eighth District—M. A. Austin, Anderson.
Ninth District—Not represented.
Tenth District—N. K. Forster, Hammond.
Eleventh District—G. D. Miller, Logansport.
Twelfth District—E. M. VanBuskirk, Fort Wayne.
Thirteenth District—W. B. Christophel, Mishawaka.

Officers—

J. H. Weinstein, president 1933.
E. E. Padgett, president 1934.
W. J. Leach, president 1935.
R. L. Sensenich, president-elect.
A. F. Weyerbacher, treasurer.
E. M. Shanklin, editor of THE JOURNAL.
T. A. Hendricks, executive secretary.

As the minutes of the October, 1934, meeting of the Council in Indianapolis were approved as printed in the November JOURNAL, on motion, duly seconded and carried, these minutes were not read.

Reports of Councilors by Districts

First District—Barclay. I have very little to report, having just taken over the unexpired term of Dr. Hare. The district society is going along very nicely. I would like to make this request—if possible the Vanderburgh County Medical Society and the First District Medical Society would like to have the postgraduate group back to Evansville again this year.

Second District—Wadsworth. Conditions in the second district are fairly good. Organizations are intact and I think more interest is being evinced by the county societies than in recent years. The men that I have met with in three or four of the counties are thinking about their immediate problems a great deal more than they did in previous years. We had the state president and secretary with us in two of our recent meetings—in Knox County and in Monroe County at Bloomington—and there is little doubt but what their presence helps the integrity of the organization to a great extent. The second district has been favored by an invitation from the Evansville postgraduate organization, which is bringing to Evansville every month an outstanding man in the United States, and that is very greatly appreciated by the second district.

Third District—Ragsdale. Everything is going along very nicely in my district. We have had two district meetings this year. Our intention in the future is to have the inactive county societies have the district meetings. In that way I think we can make them active and start them off again.

Fourth District—Graessle. Nothing to report.

Fifth District—Alexander. Nothing of importance has occurred.

Sixth District—Kennedy. Everything is in good shape in my district.

Eighth District—Austin. Nothing to report.

Tenth District—Forster. Contradicting the sometimes wise impression that everything seems best when least is happening and that perhaps sleeping dogs should be allowed to lie, the tenth district wishes to report progress and achievement in its activities. In this the speaker takes the bow for Dr. E. M. Shanklin, who recently resigned as councilor; and while optimistic to the extent that we hope to assay enough success to engage your attention, we will continue to rely on his broad and generous shoulders for support. The membership of the tenth district society approximates 250. Two meetings were held during 1934: The spring dinner meeting on May 29 at Valparaiso. At this meeting we had an attendance of 42. The fall meeting was held at Gary on October 24. An elaborate afternoon and evening program was presented. Following an excellent dinner a surprise guest speaker, "Count Ernesto Russo," self-appointed representative of Mussolini, talked on "America as I Find It." He gave an interesting and witty expose of American customs, and when he exposed himself the "Count" was all on the members and it was a long one—even, I think, to the chagrin of our president-elect. At this meeting we had an attendance of 143. Officers elected were Dr. C. C. Robinson of Indiana Harbor, president; Dr. Milton Given of East Chicago, vice-president; Dr. George F. Bicknell of East Chicago, secretary. East Chicago was chosen as the place for the next district meeting in May, 1935.

Plans for the coming year include close contact with the component county societies, particularly with respect to the question of sickness insurance plans and the agitations before the state and federal governments relative to the socialization of medicine. The tenth district pledges its support and cooperation in advancing plans of the state association for the betterment of practicing physicians and the progress of medicine.

Eleventh District—Miller. You know there are lots of times when we all become very conceited. I have had the conceit all taken out of me. The eleventh district has the slogan, "The Best District Society in the State." Since I have been councilor I find there are other good district meetings. So I am going to ask that they take that slogan off the next program. Societies all over my district are functioning and functioning fine.

Twelfth District—VanBuskirk. The twelfth district is in good shape.

Thirteenth District—Christophel. Things have been very much routine in the thirteenth district. The scientific meetings have been as good or even better than usual. I think we all notice that all of our members are paying more attention to financial, social and legislative matters. We had a very good district meeting at Michigan City. We have placed the next district meeting at Rochester, Indiana, which we feel will be most successful.

Following discussion the Council agreed that the request of the first district to hold the postgraduate meeting in Evansville again this year should be turned over to the Committee on Graduate Education without any instructions from the Council.

Reports of Officers

Dr. E. E. Padgett, the retiring president, expressed his appreciation of the cooperation he had received from the members of the Council during his term of office. He spoke of the increase in membership of the state association, the good financial report for the year, and the excellency of THE JOURNAL. He also called attention to the cooperation which the State Medical Association is receiving from the State Division of Public Health, and he discussed briefly the indigent sick problem and national legislative affairs. He said: "I am just as ready to fight as I was at the beginning of 1934."

Dr. W. J. Leach, president 1935, in expressing delight with the councilors' reports, said: "They are an indication that the state association as a whole is going in the right direction and is well equipped for another year's work."

Dr. R. L. Sensenich, president-elect, told of the work that he and the Committee on the Study of Health Insurance had done on the sickness insurance problem. He said: "Sickness insurance will be a state as well as a national thing and the profession of the state must be in condition to protect itself. As a matter of the successful carrying out of opposition to this sickness insurance in the way of a state bill, the local county medical societies assume an importance that in an economic way they have never risen to in the past. Any county society of any size, instead of having a loose organization, should have a board of trustees, and if possible it should be incorporated. At least it should have a board of trustees so that it will be a continuing policy. . . . If the men will give some attention to the information supplied them there is no reason why they can't understand what we are trying to do." He discussed the matter of supplying each member of the association with information on this subject, saying he thought this was desirable. He told of the material which has been prepared in "slogan" form, which was sent to the county society secretaries and the county legislative committees. He concluded by saying, "This problem should be seriously considered. Every doctor should be on record and he should be so equipped that he can go out and argue in defense of medicine. Indiana is getting recognition all over the country in the fact that we have pressed this program. Indiana, having started it, ought to see that it works effectively. I am afraid that it isn't getting along as fast as it should, especially in the larger cities. It is highly necessary that we get under way."

The Council discussed the matter of distributing information on this subject to the association membership, which resulted in a motion by Dr. Austin "that Mr. Hendricks be instructed to write to the county society secretaries requesting that they get in touch with their councilors and arrange a program as soon as possible on this sickness insurance matter." The motion was seconded by Dr. Forster and carried.

Dr. A. F. Weyerbacher, treasurer: "This is a lengthy and comprehensive report, and I shall only take time to give you the summary." The following statements give the auditor's findings:

Treasurer's Report

January 1, 1935.

Gentlemen:

In accordance with the instructions of the Executive Committee, following the provisions in the By-Laws, I have made an examination of the books and records of the Indiana State Medical Association and herewith submit my report of such examination.

The 1934 membership payments were verified from the last card number issued. All recorded receipts were traced to the various depositories and the December 31, 1934, statements of these depositories were reconciled to the balances carried on the various check stubs. Checks issued and invoices covering disbursements were tested and those so test-checked were found to be in order. Bonds owned by the association were examined and found to be in order.

I take this occasion to express my sincere appreciation of the many courtesies extended by the office of the executive secretary during the course of my work.

Respectfully,

W. C. MENDENHALL.

INDIANA STATE MEDICAL ASSOCIATION

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS FOR THE YEARS ENDED DECEMBER 31, 1934 AND 1933, AND COMPARISON

	Year Ended 1934	Year Ended 1933	Increase *-Decrease*
Balance Beginning of Year	$2,625.89	$1,356.37	$1,269.52
CASH RECEIPTS			
Membership Dues	19,141.00	18,850.00	291.00
Postgraduate Study	124.45	86.00	38.45
Income from Exhibits	1,792.50	870.00	922.50
Interest on Bank Balances		37.62	*-37.62*
Interest on United States Government Bonds	215.14	212.50	2.64
Interest on Indianapolis, Indiana, City Hospital Bonds	247.50	247.50	
Interest on Marion County, Indiana, Flood Prevention Bonds	212.50	212.50	
Interest on Ft. Wayne, Indiana, School Improvement Bonds	225.00	225.00	
Interest on Lake County, Indiana, State Highway Aid Bonds	150.00	50.00	100.00
Indiana State Dental Association		2.00	*-2.00*
Refund by the Journal Indiana State Medical Association		32.52	*-32.52*
Journal subscription	2.00		2.00
Total Cash Receipts	$22,110.09	$20,825.64	$1,284.45
Total	$24,735.98	$22,182.01	$2,553.97
CASH DISBURSEMENTS			
Transfers of applicable portion of dues to: The Journal of the Indiana State Medical Association	$5,492.00	$5,406.00	$86.00
Medical Defense Fund.	2,044.50	217.30	1,827.20
Loan to the Journal		500.00	*-500.00*
Executive Office Expense	8,318.11	8,094.66	223.45
Publicity Committee	431.75	395.98	35.77
Public Policy	187.90	399.76	*-211.86*
Council	123.29	160.98	*-37.69*
Treasurer's Office	311.36	205.68	105.68
Annual Session	1,720.33	1,382.90	337.43
Miscellaneous Committees	582.20	525.54	56.66
Post Graduate Study	211.41	192.32	19.09
Attorney's Fees—Medical Defense		600.00	*-600.00*
Expenditures for Medical Defense prior to creation of fund		1,475.00	*-1,475.00*
Total Cash Disbursements	$19,422.85	$19,556.12	*$ -133.27*
Balance End of Year	$5,313.13	$2,625.89	$2,687.24

MEDICAL DEFENSE FUND

STATEMENT OF CASH RECEPITS AND DISBURSEMENTS—JANUARY 1—DECEMBER 31, 1934

Cash on Hand January 1, 1934		$217.30
Add: Cash Received		
From General Fund	$2,040.00	
Check drawn on General Fund but not Deposited	4.50	2,044.50
Total		$2,261.80
Deduct: Cash Disbursements		
Attorney's Salary	$600.00	
Bond Premium	15.00	
Printing Checks	11.25	
Malpractice Fees	800.00	
Federal Tax on Checks	.28	
Total Disbursements		1,426.53
Cash on Hand December 31, 1934		$835.27

INVESTMENTS—DECEMBER 31, 1934

	Maturity	Par Value	Rate
GENERAL FUND			
Ft. Wayne, Indiana, School Improvement	1940	$3,000.00	4½%
Lake County, Indiana, State Highway Aid	1937	2,000.00	5%
Marion County, Indiana, Flood Prevention	1949	3,000.00	4¼%
Indianapolis, Indiana, City Hospital	1950	1,000.00	4%
Indianapolis, Indiana, City Hospital	1951	4,000.00	4%
Total		$13,000.00	
Items on Which Interest Is in Default and Value Is Doubtful:			
Beachton Court Apartments, Chicago, Ill., Certificates of Deposit, 1932	1938	$4,000.00	6%
Rokeby Apartment Hotel, Chicago, Ill., Certificate of Deposit, 1932	1937	1,000.00	6%
Total Deposit Box Contents Representing Investments of the General Fund		$18,000.00	
MEDICAL DEFENSE FUND			
United States Government Securities	1943–45	$3,000.00	3¼%
United States 4th Liberty Loan	1938	2,000.00	4¼%
Indianapolis, Indiana, City Hospital	1941	1,000.00	4¾%
Ft. Wayne, Indiana, School Improvement	1940	2,000.00	4½%
Marion County, Indiana, Flood Prevention	1949	2,000.00	4¼%
Total Deposit Box Contents Representing Investments of the Medical Defense Fund		$10,000.00	
Total All Investments at Par Value		$28,000.00	

I do hereby certify that the above listed securities of the Indiana Medical Association were examined by me January 8, 1935, at the Indiana National Bank. All 1934 interest coupons had been properly detached and the interest therefrom reported in the cash receipts of the association.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION SUMMARY OF CASH RECEIPTS AND DISBURSEMENTS FOR THE YEAR ENDED DECEMBER 31, 1934

Balance January 1, 1934		$71.94
Add: Cash Receipts		
Subscriptions	$5,553.00	
Single Copy Sales	19.00	
Electrotypes (paid by authors)	18.59	
Advertising	8,262.40	
Collections on Old Accounts Receivable	670.50	
Total Receipts		14,523.49
Total		$14,595.43
Deduct: Disbursements		
Management and Editorial Expenses	$5,980.00	
Office Expenses	1,390.33	
Printing	4,740.99	
Postage	385.00	
Electrotypes	332.25	
Expenses of Editorial Board	44.67	
Total Disbursements		12,873.24
Balance December 31, 1934		$1,722.19

Dr. E. M. Shanklin, editor THE JOURNAL, made a report upon the financial status of THE JOURNAL (contained in the treasurer's report), and he asked that THE JOURNAL be budgeted enough funds to allow it to print at least one hundred more reading pages in 1935 than were printed in 1934. Dr. Samuel Kennedy moved that the matter of apportioning THE JOURNAL and the Association funds be left up to the Executive Committee to settle in a legal manner. This motion was seconded by Dr. Wadsworth and carried.

Unfinished Business

The letter from Lulu V. Cline, R. N., president of the Indiana State Nurses' Association, concerning an eight-hour day for nurses, which was tabled at the October meeting of the Council, was brought to the attention of the Council. On motion of Dr. Wadsworth, seconded by Dr. Kennedy, the matter was tabled again.

Suggestions and Proposals for 1935 Meeting at Gary

1. Dates set by Executive Committee upon direction of the Council are Tuesday, Wednesday and Thursday, October 8, 9, and 10, 1935. These dates were approved by the Council.

2. *General outline of suggested program:*

Monday, October 7, 1935

Meeting of state health officers.

Tuesday, October 8, 1935

Morning—Registration and golf.
Afternoon—Meeting of the House of Delegates.
Evening—Smoker and stag party.

Wednesday, October 9, 1935

Morning—General meeting.
Afternoon—Section meetings.
Evening—Annual banquet.

Thursday, October 10, 1935

Morning—General meeting.
Noon—Adjournment.

Dr. Shanklin stated that the Lake County Medical Society had authorized him to say that it preferred to have general and section meetings this year. It was the unanimous opinion of the Council that this matter should be left up to the Program Committee and that the Program Committee should arrange for sectional meetings.

3. *Mid-Western Anesthetists' Meeting in Conjunction with State Association.*. (This subject was to have been discussed by Dr. Romberger, chairman of the Section on Anesthesia, but due to his absence it was referred to the program committee.)

4. *Convention Facilities for 1935.* Dr. Shanklin, chairman of the general arrangements committee, made a report to the Council concerning hotel, meeting and exhibit accommodations, entertainment, etc.

5. *Scientific Exhibit.* It was moved by Dr. Padgett, duly seconded, and carried, that the scientific exhibit shall be continued.

Dr. Forster called attention to the fact that the electric current in Gary is 25 cycles, 110 volts, A. C., and that the commercial and scientific exhibitors should be so informed.

6. *Employment of Professional Medical Stenographers.* Dr. Padgett moved that professional stenographers be employed and the same arrangement be continued as has prevailed the last few years in using the headquarters personnel in taking notes on some of the meetings. Motion seconded by Dr. Kennedy and passed.

Membership Problems

1. *Membership Report by Districts.*

MEMBERSHIP REPORT
INDIANA STATE MEDICAL ASSOCIATION
December 31, 1934

County Society	*No. M. Ds. in County	Members Dec. 31, 1934	Members Dec. 31, 1933	Loss-Gain	Eligible Non-Members	New Members	Removed and Retired	Deceased	Ineligible
1st District									
Posey	23	14	13	1	4	...	3	..	2
Vanderburgh	150	94	99	—5	36	2	13	4	3
Warrick	21	6	6	...	10	...	3	2	..
Spencer	19	12	11	1	4	1	1	1	1
Perry	13	7	9	—2	5	...	1	..	..
Gibson	32	24	24	....	2	....	5	1	..
Pike	12	6	6	....	4	...	..	1	1
Total	270	163	168	—5	65	3	26	9	7
2nd District—									
*Knox	64	34	24	10	19	2	5	5	2
Daviess-Martin	30	22	23	—1	5	1	2	...	1
Sullivan	27	22	22	....	2	1	2	....	1
*Greene	26	16	14	2	9	1	....	..	1
Owen	13	9	9	...	3	...	..	1	...
Monroe	39	30	34	—4	6	2	3	..	..
Total	199	133	126	7	44	7	12	6	5
3rd District—									
Lawrence	32	23	23	.....	...	1	9	....	.
Orange	25	17	18	—1	4	1	3	3	..
Crawford	10	1	3	—2	8	..	..	1	...
Washington	16	10	8	2	1	2	1	3	1
*Scott	7	2	2	....	1	...	3	..	1
Clark	30	15	16	—1	11	..	1	2	1
*Floyd	55	40	42	—2	4	....	3	4	4
*Harrison	13	5	5	....	5	...	1	3	.
Dubois	22	13	15	—2	6	..	2	1	...
Total	210	126	132	—6	40	4	23	17	7
4th District—									
Brown	...	...	....	.....	..	.....	..	..	..
Bartholomew	35	24	24	.....	6	....	1	1	3
Decatur	27	17	18	—1	9	....	.....	4	..
Jackson	21	17	17	....	2	.....	.....	1	2
Jennings	12	7	10	—3	1	.....	3	1	...
Ripley	21	12	15	—3	5	1	1	2	1
Jefferson	30	20	18	2	4	1	6	1	..
*Switzerland	7	6	6	....	...	1	.....	1	....
Dearborn-Ohio	26	16	17	—1	3	1	2	2	3
Total	179	119	125	—6	30	4	13	13	9
5th District—									
Parke-Vermillion	43	22	22	...	15	....	4	1	1
Putnam	19	16	17	—1	2	...	.....	...	1
Vigo	130	109	112	—3	10	3	2	4	6
Clay	24	15	15	...	6	...	.....	3	2
Total	216	162	166	—4	33	3	6	8	10
6th District—									
Hancock	22	19	17	2	1	1	1	2	..
Henry	42	28	30	—2	9	1	1	3	1
Wayne-Union	84	53	51	2	14	4	5	1	11
*Rush	26	20	21	—1	3	1	3	1	..
Fayette-Franklin	28	19	21	—2	1	....	6	..	2
Shelby	38	25	19	6	7	4	5	1	...
Total	240	164	159	5	35	11	21	8	14
7th District—									
Hendricks	28	19	16	3	4	4	3	..	2
Marion	778	477	467	10	214	26	24	18	48
Morgan	34	17	18	—1	13	1	3	1	..
Johnson	25	7	9	—2	14	....	1	1	2
Total	865	520	510	10	245	31	31	20	52

MEMBERSHIP REPORT—Continued

County Society	*No. M. Ds. in County	Members Dec. 31, 1934	Members Dec. 31, 1933	Loss-Gain	Eligible Non-Members	New Members	Removed and Retired	Deceased	Ineligible
8th District—									
Madison	96	63	60	3	20	2	7	5	2
Delaware Blackford	100	63	62	1	26	.	4	6	4
Jay	24	14	14	..	9	1	1	..	..
Randolph	33	21	23	—2	5	....	4	3	.....
Total	253	161	159	2	60	3	16	14	6
9th District—									
Benton	17	14	12	2	1	2	....	...	2
Fountain-Warren	26	20	20	.....	3	1	....	2	2
Tippecanoe	90	78	78	....	8	2	2	1	1
Montgomery	51	30	29	1	9	.	9	4	..
Clinton	38	20	22	—2	8	.	5	1	4
Tipton	18	11	11	....	5	.	2	..	....
Boone	29	13	11	2	10	2	3	1	2
Hamilton	29	23	23	....	2	.	2	...	2
White	19	4	6	—2	14	....	...	....	1
Total	317	213	212	1	60	7	23	9	14
10th District—									
Lake	261	190	183	7	52	9	8	6	8
Porter	28	23	22	1	3	1	2	1	.....
Jasper-Newton	25	11	13	—2	10	....	4	....	.....
Total	314	224	218	6	65	10	14	7	8
11th District—									
*Carroll	24	22	21	1	1	....	1	.....	....
Cass	53	39	33	6	9	3	2	.....	3
Miami	37	24	20	4	11	3	1	1	....
Wabash	35	28	27	1	4	.....	3	....	.....
Huntington	36	21	21	....	11	.....	2	.....	2
Howard	46	31	31	...	5	2	4	....	6
Grant	83	47	44	3	23	5	5	2	6
Total	314	212	197	15	64	13	18	3	17
12th District—									
Lagrange	15	8	8	.....	4	1	2	1	....
Steuben	25	10	9	1	11	1	2	2	.....
Noble	28	25	25	.....	3	1	.....	.....	.....
Dekalb	31	22	21	1	5	3	3	1	1
Whitley	16	10	10	..	2	.....	3	....	1
Allen	195	133	137	—4	35	6	4	4	19
Wells	22	16	15	1	5	1	....	.....	1
Adams	22	18	16	2	2	4	1	.....	1
Total	354	242	241	1	67	17	15	8	23
13th District—									
LaPorte	66	48	47	1	12	1	6	1	.....
St. Joseph	172	133	134	—1	23	4	6	1	10
Elkhart	83	66	69	—3	8	2	4	4	2
Starke	8	..	....	...	8	.....	.....	.....	.....
Pulaski	12	4	5	—1	8	....	.....	.....	.....
Fulton	16	11	11	....	4	.....	...	1	....
Marshall	34	18	19	—1	11	.....	2	.....	3
Kosciusko	30	18	17	1	5	.....	3	1	3
Total	421	298	302	—4	79	7	21	8	18

SUMMARY BY DISTRICTS

1st District	270	163	168	—5	65	3	26	9	7
2nd District	199	133	126	7	44	7	12	6	5
3rd District	210	126	132	—6	40	4	23	17	7
4th District	179	119	125	—6	30	4	13	13	9
5th District	216	162	166	—4	33	3	6	8	10
6th District	240	164	159	5	35	11	21	8	14
7th District	865	520	510	10	245	31	31	20	52
8th District	253	161	159	2	60	3	16	14	6
9th District	317	213	212	1	60	7	23	9	14
10th District	314	224	218	6	65	10	14	7	8
11th District	314	212	197	15	64	13	18	3	17
12th District	354	242	241	1	67	17	15	8	23
13th District	421	298	302	—4	79	7	2	8	18
Total	4152	2737	2715	22	887	120	239	130	190

*Physicians are listed in the counties in which they hold membership; not in the counties in which they reside.

2. *Counties where there are no societies—Brown and Starke.* Dr. Christophel reported that he had made vigorous efforts to organize Starke County but so far little had been accomplished. He suggested that perhaps Starke County could be taken into some other county, making a joint county society.

He said three or four Starke County physicians belong in adjoining counties.

Luncheon

The Council recessed for luncheon in parlor A, fifth floor of the club, at 1:00 o'clock.

Dr. Padgett presented a certificate of appreciation to Dr. J. H. Weinstein, president, 1933.

Dr. F. S. Crockett, a member of the special legislative committee of the American Medical Association, talked upon national legislative matters as they affect the medical profession—social insurance involving medicine, and veterans' affairs. As a member of the special committee appointed to meet with the director of the Governor's Unemployment Relief Commission Dr. Crockett reported that fee schedules for poor relief work for all counties in the state had been obtained and a recapitulation of them had been prepared. Although the matter is moving rather slowly, contact is being maintained with Mr. Coy with a hope that some more equitable plan may be worked out in the future for the services rendered by physicians under FERA Rules and Regulations No. 7. Dr. Crockett spoke also of the fact that Mr. Coy desires every man who is employed by the government to have a physical examination and Mr. Coy has asked what the proper examination fee should be.

Dr. Verne K. Harvey, director of the State Division of Public Health, made a detailed report of the activities of the State Division of Public Health since its reorganization. This report will appear in the March issue of THE JOURNAL. Dr. Harvey's program for the future is built around the following points:

(1) Notification of registration of births.

(2) Employment of a contact man to visit and cooperate with local medical societies. This should be a man who is thoroughly familiar with the field of public health and the practice of medicine, with a special knowledge of pediatrics. His whole function would be to see that the educational campaigns were put on by the medical societies in a cooperative way. His services would be available to them if they wanted to use him.

(3) Repeal of the hydrophobia law so that patients may be treated at home. This would save the state a great deal of money in traveling and maintenance expense.

(4) Law proposed to license restaurateurs, the money to be used for food inspection.

(5) Law proposed, backed by the milk industry, to license milk distributors.

(6) Rural community sanitation legislation which would involve the creation of district sanitary units.

(7) Legislation which would create full-time district health officers. Dr. Harvey asked the opinion of the Council upon the three following proposals in regard to this legislation:

a. Full-time health officer to be a physician;
b. Act is to be permissive in character and not compulsory;
c. Combination of two or three counties may be effected with one health officer in charge, with the approval of the State Division of Public Health.

Mr. Albert Stump, attorney for the Association, spoke of—

(1) The bill which is to be presented to relieve physicians of the burden which is placed upon them when they render service in automobile accident cases through the fact that the injured persons seldom pay either their hospital or physician's bills;

(2) The optometry bill which has been submitted by the Board of Optometry which would make the present optometry law enforceable and prevent misleading advertising;

(3) Letter from Dr. George Collett, Crawfordsville, in regard to indigent patients giving the trustee a note which will enable the trustee to collect money from the patients who have received medical services, which services have been paid for by the trustee. Mr. Stump was to answer Dr. Collett's letter and make a formal report of his opinion at the next meeting of the Executive Committee.

Dr. W. D. Gatch, dean of the Indiana University School of Medicine, and chairman of the State Advisory Public Health Council, talked upon the Indiana plan of public health education. Under the new set-up of the state board of health, education of the public is given over entirely to the organized profession of the state. Results so far have been satisfactory and the state has been saved $120,000.00 a year, while the death rate is just as low as it was under the old plan. At the last meeting of the Advisory Health Council it was agreed that the diphtheria immunization campaign should be continued, and the following resolution was unanimously approved:

1. That the result of the previous diphtheria prevention campaign was, on the whole, satisfactory.
2. That it is desirable to continue such work, the publicity to be directed by Dr. Rupel's committee and Dr. Wishard's committee.
3. That a contact man be employed by the Division of Public Health to be under the direct control of the Dean of the Medical School or under the control of anyone whom he may appoint. Such contact man to correlate activities of the central agencies and the doctors out in the state in all public health matters. It was recommended that the contact man know public health work and practical medicine from a pediatric standpoint.
4. That the legislature be asked for an appropriation for toxoid to be furnished children of parents on relief rolls upon proper certification by the township trustee and a physician appointed by the county medical society.

The matter of devising ways and means of carrying out the above resolution was left to the following committee of physicians: O. O. Alexander, Terre Haute, chairman; Albert M. Mitchell, Terre Haute; W. J. Leach, New Albany; R. L. Sensenich, South Bend; Ernest Rupel and E. E. Padgett, Indianapolis.

In closing, Dr. Gatch said: "I would make this plea, that you carry on the campaign as you did last year, with state and local publicity, and that this movement be called to the attention of all the secretaries of the state and that everything be done to secure the immunization of as many children throughout the state as possible."

Dr. O. T. Scamahorn, chairman of the Committee on Legislation and Public Policy, explained the proposed bill which would revamp the present health officer bill. "This bill proposes that each county have either a full-time or part-time health officer and that he be a physician. This bill will provide that the president of the county commissioners, the doctor and the prosecuting attorney shall be the health board in each county. The bill provides that in case a full-time health officer is not employed a full-time nurse may be employed subject to the health officer of such jurisdiction."

Dr. D. O. Kearby discussed the question of lye burns in children, noting the tremendous expense that must be borne by the various counties in sending children to the Riley Hospital in lye burn cases, and telling of the work of his committee in contacting the manufacturers and distributors of lye. He said his committee would meet with the grocers' association next summer to discuss this question. He asked the advice of the Council in this matter, saying that his committee had abandoned the idea of printing and distributing literature pertaining to this subject which would cost approximately $150.00.

Dr. Gatch: "The nursing situation in these United States is utterly chaotic. We have all kinds of complaints that nurses are practicing medicine. We need legislation to protect the public, the profession, and the nurse herself. My definition of a nurse is: 'A nurse is a person specially trained to assist a physician in the prevention and treatment of disease.' I wish in your executive session you would consider this matter and if you see fit, have a bill drawn by Mr. Stump and submitted to the legislature."

Mr. Hendricks told of the radio news report of January 10 announcing that a new federal plan for providing medical services for the indigent was contemplated wherehy the patient would have the right to choose his own physician, whose services were to be paid for on a fee basis. He said he was checking with Dr. West of the American Medical Association on this, trying to get specific details.

He also spoke of the federal licensing system to control the professional use by physicians of narcotics, recently threatened through the public press. He said that Dr. Woodward of the American Medical Association had written stating that whether or not a control system is set up, depends upon

the effectiveness with which the State Board of Medical Registration and Examination prosecutes or revokes the licenses of physicians who violate the narcotic law. "Dr. Davidson assures us that the State Board of Medical Registration and Examination has an invariable rule which has been in effect for the last fifteen years to revoke the license of any doctor convicted for the violation of the Harrison narcotic act."

Dr. Clarke Rogers, Dr. A. M. Mitchell, Dr. W. H. Kennedy, and Dr. H. H. Wheeler also attended the luncheon.

Executive Session Following Luncheon

Dr Samuel Kennedy made the motion that the matter of the health officer bill be referred to the Committee on Legislation and Public Policy. Motion seconded by Dr. Miller and carried. Copies of the proposed bill were to be sent to members of the Council who were to send criticisms and suggestions to the legislative committee.

Dr. Miller moved that the Council recommend that the State Division of Public Health supply toxoid free to the indigent patient; motion seconded by Dr. Kennedy and passed. Dr. Alexander stated that in making this recommendation the Council should point out to the State Division of Public Health that it is not to take it to mean that another extensive campaign is advocated. This matter should be left up to the individual physician and the local county medical societies.

Dr. VanBuskirk moved that the proposed legislation to define a "nurse" be referred to Mr. Stump, recommending that he formulate a law defining a nurse, for submission to the legislature. Motion seconded by Dr. Miller and carried.

In regard to the automobile accident legislation Dr. Miller made the motion that the Council recommend the passage of this bill; motion duly seconded and carried.

Additional Legislative Matters

1. *Erection of a New Tuberculosis Hospital in Southern Indiana.* Dr. Barclay read letters from Dr. G. C. Johnson and Dr. Paul D. Crimm of Evansville favoring this legislation. Following discussion, Dr. Leach moved that the Council endorse the building of a tuberculosis sanatorium in southern Indiana; motion seconded and carried.

2. *One Per Cent Gross Income Tax.* Dr. Miller made the motion that the Council uphold the 1% gross income tax law; seconded by Dr. Christophel, and carried.

3. *Bill Giving a Corporation the Right to Practice Medicine in Indiana.* Mr. Hendricks explained that clinics employing groups of physicians on regular salaries had been established in various places. It is illegal in Indiana for a corporation to practice medicine. A bill is proposed which will enable such establishments to operate in this state. (It was taken by consent that the Council is opposed to the introduction of this proposed bill.)

4. *Legislation which would make non-profit organizations which have insurance features comply with regular insurance laws of the state.* Mr. Hendricks stated that during the past year a number of "benefit" group insurance companies giving medical and nursing services, etc., had been organized. As a result of certain of these companies being formed in Indiana the Better Business Bureau is taking action to make these insurance companies comply with the insurance laws of the state. (The Council was unanimous in its approval of such legislation.)

5. *Abraham Epstein's bill to socialize the practice of medicine.* Dr. Austin moved that a meeting of the Health Insurance Committee with the councilors, Dr. Sensenich, and the Legislative Committee be held at eleven o'clock Sunday, January 27, at the Indianapolis Athletic Club. Motion seconded by Dr. VanBuskirk and carried.

Annual Session of American Medical Association

Dr. Miller moved that the executive secretary attend the annual session of the American Medical Association which will be held at Atlantic City from June 10 to 14, 1935. Motion seconded by Dr. Christophel and carried.

New Business

1. A formal contract was prepared by the attorney of the Association and signed by Dr. Shanklin, editor of THE JOURNAL, and Dr. Alexander, chairman of the Council.

Dr. Wadsworth moved that the salary of the editor of THE JOURNAL be fixed at $100.00 a month for the ensuing year. Motion seconded by Dr. VanBuskirk and carried.

2. Program for the tenth annual secretaries' conference to be held at the Indianapolis Athletic Club, Sunday, January 27, brought to the attention of the Council.

3. The Council took no action on the request of the Illinois State Medical Society that a delegate from the Indiana State Medical Association be sent to its annual meeting to be held at Rockford, Illinois, May 21 to 23, 1935.

4. Dr. E. O. Asher, chairman of the Committee for the Study of Puerperal Mortality, through the executive secretary, asked for the Council's opinion on having meetings where the subject of obstetrics only is discussed. There were only three papers on this subject in THE JOURNAL last year. The Council took no action on this.

5. Dr. Austin made the motion, which was seconded by Dr. Miller, and carried, that each member of the headquarters office staff be given a week's salary annually as a Christmas gift. The motion was made retroactive to include Christmas of 1934.

Elections for 1935

Upon motion of Dr. Miller, seconded by Dr. Austin, and carried, the present members of the Executive Committee, Dr. William H. Kennedy and Dr. H. H. Wheeler, were re-elected for 1935.

Upon the motion of Dr. Wadsworth, Dr. O. O. Alexander of Terre Haute was unanimously re-elected chairman of the Council for 1935.

There being no further business, the meeting was adjourned.

THOMAS A. HENDRICKS,
Executive Secretary.

INDIANA STATE MEDICAL ASSOCIATION EXECUTIVE COMMITTEE

December 16, 1934.

Roll call showed the following present: H. H. Wheeler, M. D.; E. E. Padgett, M. D.; O. O. Alexander, M. D.; W. J. Leach, M. D.; R. L. Sensenich, M. D.; E. M. Shanklin, M. D.; A. F. Weyerbacher, M. D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary. Guests, F. T. Romberger, M. D., and A. M. Mitchell, M. D.

In the absence of Dr. William H. Kennedy, Dr. O. O. Alexander presided.

Minutes of the meeting of November 18 approved.

Membership Report

Number of members on December 15, 1934	2,730
Number of members on December 15, 1933	2,711
Gain over last year	19
Number of members on December 31, 1933	2,715

Recommendations in Regard to Health Administration in Indiana

Recommendations presented by Dr. Verne K. Harvey at the November meeting of the committee received the approval in general of the Executive Committee. The committee, however, felt that this approval should be given with a reesrvation in regard to recommendations concerning the creation of any full-time health officers. The committee expressed its appreciation of the spirit of cooperation evinced by the state health authorities not only upon this but upon many other occasions.

Diphtheria Immunization Campaign

No further action in regard to diphtheria immunization campaign from a statewide viewpoint. The Indianapolis Medical Society, however, will undertake a campaign for 1935.

Suggestion made by the Executive Committee that Dr. Verne Harvey appear before the midwinter meeting of the Council and impress upon councilors the importance of continuing health educational work of a definite nature by the physicians in order to maintain the present Indiana set-up of cooperation between the State Division of Public Health and the State Medical Association.

Actions Left Over from 1935 Annual Session, Indianapolis

(1) Dr. Padgett will present the certificates of merit to Dr. J. H. Weinstein, president 1933, at the midwinter meeting of the Council on January 13, 1935.

(2) *Committee on Expert Testimony.* Correspondence with W. T. Fox, president of the Indiana State Bar Association, appointing a committee to meet with a committee of the Indiana State Medical Association, forwarded to Dr. Max Bahr, of Indianapolis, chairman of the Committee on Expert Testimony.

(3) Correspondence with Dr. A. C. Yoder in regard to amendment to the Constitution and By-Laws brought to the attention of the committee.

1935 Meeting at Gary

(1) Dr. Wheeler told of the resolution recommending that the State Association pay all entertainment costs which was passed by the Indianapolis Medical Society and which will be presented to the next House of Delegates. If the State Association has to pay all expenses of convention including entertainment, a limit should be set, and perhaps it would be necessary to charge a convention registration fee.

(2) Preliminary report prepared by Dr. J. M. White, president of the Lake County Medical Society, and Dr. E. M. Shanklin, General Arrangements chairman, ready for the council meeting.

(3) Dr. Floyd T. Romberger presented the correspondence in regard to the Mid-Western Anesthetists meeting with the State Association. The executive committee approved the plan of a cooperative meeting in general and stated that details should be worked out by the Scientific Program Committee and the matter announced to the Council.

(4) The committee feels that at future annual meetings special effort must be made to catch the gate-crasher.

Invitation for 1936 A. M. A. Meeting in Indianapolis

The Convention Bureau of Indianapolis is still interested in obtaining this convention. Letters have been written to Dr. West, inviting the proper persons to make a trip to Indianapolis to make a survey of local conditions to determine whether or not Indianapolis has adequate accomodations for such a meeting.

Annual Audit of Books

The treasurer of the State Association was authorized to obtain a local firm or individual to audit the books.

Future Medical Meetings

(1) Council meeting Sunday, January 13, 1935.

(2) Budget Committee meeting following Council meeting.

(3) Editorial Board meeting, Sunday morning, January 27, 1935.

(4) Secretaries' Conference, Sunday afternoon, January 27, 1935. Program prepared with Dr. Walter L. Bierring, Dr. Oliver J. Fay, Albert G. Milbank and William J. Burns as guest speakers.

(5) Northwest Medical Conference at St. Paul, February 24, 1935.

Legislative and Legal Matters

(1) *Automobile accident legislation.* Following the recommendation made at the last meeting of the Executive Committee, attempts will be made to formulate and pass a bill at the next session of the legislature authorizing the expenditure of funds derived from the gasoline and automobile taxes for the payment of physicians, ambulances, and hospitals for services rendered those injured on the highways. Meetings have been held with the hospital association and the insurance carriers to formulate plans for drafting this bill. Bill will be drafted shortly. Letter received from George Crownhart, secretary of the Wisconsin Medical Society, asking for information on this proposed method of taking care of automobile accident cases.

(2) Letter received from Dr. Edgar Denny, of Milton, suggesting that a pamphlet be prepared containing the legal-medical material that appears each month in THE JOURNAL. Albert Stump is to obtain figures on costs of compiling such a pamphlet for the next meeting of the committee.

(3) *Administration of anesthetics.* Numerous complaints have been received by the Executive Committee against the ruling of the State Board of Medical Registration and Examination. These have been forwarded to the State Board.

(4) Rumor that an attempt will be made to introduce and pass a bill which will enable a corporation to practice medicine made known to the committee.

Proposed 3% Retail Sales Tax Amendment

Question brought forward by Dr. Romberger as to whether or not the proposed 3% retail sales tax amendment, which would eliminate the 1% gross income tax, would be more beneficial or less beneficial to the profession. The executive secretary reported that such legislation had not been formulated as yet and as soon as a bill is formulated the provisions affecting the medical profession will be made known to the members of the profession by the Legislative Committee. The big question is whether or not professional services will be taxed 3%.

FERA Work

(1) Report of the conference with Wayne Coy, director of the Governor's Commission on Unemployment Relief, with Dr. Crockett and the executive secretary, made to the committee. The executive secretary reported that Mr. Coy's office was drawing up regulations for the administration of medical services under FERA regulations No. 7 which would be more equitable to the members of the medical profession and to the public at large. Forms and a detailed method of the working of the Relief Commission in Pontiac, Michigan, prepared by R. G. Tuck, M. D., director of the Medical Division of that commission, forwarded to Mr. Coy.

(2) Request made by the headquarters office for each county society to send in its fee schedule. The Executive Committee felt that it would be perfectly proper to turn over these fee schedules to Mr. Coy in order that compilation may be made and perhaps some information thereby gained which will help establish workable schedules for the care of the indigent sick in the various communities. The committee agreed with Dr. Crockett and the executive secretary that the State Medical Association cannot submit a fee schedule for the state. This, the Executive Committee feels is impossible, and it is its opinion that the proper method to approach any schedule would be on a percentage of the customary local fee, which percentage should be at least equal to the cost of doing the business. Report of any progress that is made in regard to this matter is to be brought to the attention of the Executive Committee at its next meeting.

Sickness Insurance

(1) Additional pamphlets prepared by the American Medical Association distributed to members of the committee.

(2) Many letters received by the headquarters office requesting additional information in regard to the Indiana contact plan. In each of these cases additional information was sent and whenever possible a man with special knowledge on the subject was assigned to contact the local county society from which the request came.

(3) Bulletin from the Committee on Legislative Activities of the American Medical Association brought to the attention of the committee.

(4) Report made by Dr. VanBuskirk that Dr. L. T. Rawles has covered his district of the state explaining the Indiana contact plan to the various societies in the twelfth medical

district. The committee expressed its appreciation for Dr. Rawles' interest and effective work in this matter.

(5) Letter received from Dr. Ralph Fenton, of Portland, Oregon, giving the latest information in regard to the connection of the Portland medical profession with the Multnomah Industrial Health Association which is operating in that state.

(8) Request made by Dr. R. G. Leland, of the American Medical Association, for statement of any action taken by the Indiana State Medical Association on sickness insurance. This request was answered that both officially and unofficially the State Association has opposed sickness insurance.

(9) The attention of the Executive Committee was called to the December issue of *Survey Graphic* and to several issues of the magazine *Today*, a publication by Raymond Moley, advocating health insurance plans.

Complaint Concerning Red Cross Nurse

The State Optometry Board filed a complaint with the State Division of Public Health against a Red Cross nurse recommending a certain specified oculist. Dr. Harvey answered the complaint stating that the nurse should on all occasions recommend that a patient be referred directly to the family physician.

Report of Committee on Mental Health

The Mental Health Committee, of which Dr. LaRue Carter is chairman, reported as follows concerning Dr. Bahr's plan for the establishment of mental health clinics in Indiana: "After a brief discussion it was moved by Dr. Bahr that any definite action be deferred for another year in view of the present economic state."

Resolution against Broadcasts Entitled "Doctors, Dollars and Disease"

Resolution passed by the Chicago Medical Society against broadcasts entitled "Doctors, Dollars and Disease" brought to the attention of the committee.

County Medical Society Programs

Suggestions from Dr. C. J. Cummer, past president of the Ohio State Medical Association, in regard to scientific programs which had been forwarded to Dr. A. M. Mitchell were discussed by the Committee. Dr. Mitchell feels that the Ohio plan of study outlines may be suitable for the larger county medical societies but the plan is not applicable generally to Indiana. Plan of Dr. J. S. Brown, of Carlisle, similar to the Ohio plan, has been brought to the attention of Doctor Mitchell and Dr. Mitchell reported that suitable recommendations had been made to Dr. Brown.

The Executive Committee suggested that consideration be given to the appointment of a state committee upon county medical society programs to formulate suggested program outlines, first for small, and second, for large medical societies.

Emergency Committee in Aid of Displaced Foreign Physicians

The committee felt that there are no vacancies for foreign physicians displaced by Germany in Indiana. The committee pointed out that the supply from our own medical school is greater than the demand and that no shortage of physicians exists in this state.

Another Medical Directory

The executive secretary was to get from the National Life Underwriters definite information in regard to the National Underwriters Bureau of Kansas City which has been listing names of physicians in Indiana for $10.00.

The Journal

Mr. Friedman, advertising agent of THE JOURNAL, reported that contracts could be available from companies desiring to advertise high grade wines. The committee did not feel that it should take beer, wine, or liquor advertisements of any sort.

Responses to Advertising in THE JOURNAL

The committee suggested that this matter of responses to advertisements in THE JOURNAL be brought to the attention of the Council at its midwinter meeting January 13, and it also should be spoken of by Dr. A. M. Mitchell during the secretaries' conference on January 27.

Letter of thanks received from the American Red Cross for the contribution of space which was given to that organization in the November JOURNAL.

INDIANA STATE MEDICAL ASSOCIATION

BUREAU OF PUBLICITY

November 30, 1934.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D., and Thomas A. Hendricks, executive secretary.

Release for publication in Saturday, December 15, papers brought to the attention of the Bureau. The Bureau authorized the substitution of a release upon periodic health examinations for the present and suggested that the release, "Common Sense and the Common Cold," be submitted to several physicians for suggestions and criticisms.

Radio release:

Saturday, November 24—"Thanksgiving Eating."

List of United States Public Health Service publications brought to the attention of the Bureau and one member of the Bureau was appointed to review this list and select publications which might be of interest to the Bureau.

Letter received from physician in the southern part of the state, stating that he has possession of a library in which there are many old medical books. The secretary was instructed to get in touch with the librarian of the Indiana University School of Medicine in regard to these books and to thank the physician for bringing this to the attention of the Bureau of Publicity.

Letter received requesting information in regard to "the practice of fee-splitting as engaged in by certain unscrupulous physicians." The Bureau feels that it would be well for the legislative committee to make an investigation of this matter with a view to presenting a bill curbing any alleged abuses at some future session of the legislature.

Clippings of articles which appeared in the local press, mentioning names of obstetricians, pediatricians, and a nose and throat man, brought to the attention of the Bureau. The Bureau expressed the opinion that the use of the physicians' names in the articles in question was not in harmony with the attitude often expressed in resolutions of the House of Delegates of the American Medical Association and of the Indiana State Medical Association.

* * *

December 14, 1934.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D.; J. H. Stygall, M. D.; and T. A. Hendricks, executive secretary.

Release, "Common Sense and the Common Cold," put in final form for publication.

Release, "Holiday Health," for publication in Saturday papers, December 22, approved by the Bureau.

Radio releases:

Saturday, December 1—"Sinus Trouble."

Saturday, December 8—"Bodily Bookkeeping."

Request made by a physician in regard to the ruling of the Bureau of Publicity concerning the use of a physician's name over the radio in connection with a tuberculosis Red Cross broadcast. In this connection the Bureau re-states its ruling concerning radio broadcasts:

> "The Bureau has adopted a rule that no physician who is in private practice should have his name mentioned over the radio in connection with the Bureau of Publicity broadcasts, but the names of physicians holding public office and connected with public institutions may be mentioned over the radio, if they are not in private practice."

The historian of the society reported that his first article upon the history of Indiana medicine was ready for publication in the January issue of THE JOURNAL.

Following the instructions of the Bureau, the secretary prepared a letter which was to be sent to the secretaries of the state medical societies, asking for information concerning any special rules and regulations that these societies may have

concerning publicity. The secretary was instructed to enclose the suggestions made by the Bureau to speakers talking before lay audiences and also the rule of the Bureau concerning radio broadcasting.

The following statement from the Bureau was prepared for the memorial meeting held by the Indianapolis Medical Society for Dr. A. M. Mendenhall and Dr. John Carmack:

"Seldom has an entire community been more depressed with a deep sense of loss than has Indianapolis since the tragedy that so suddenly took the lives of Dr. Mendenhall and Dr. Carmack. Men of outstanding character, recognized as leaders in their profession, both locally and nationally, these two physicians died at the rising tide of their careers, and the members of the profession and the city can easily conceive what heights they might have reached and how far along the road to fame they might have traveled had they lived.

"The long list of special honors and the positions of responsibility held by these two men show, better than words, their devotion to the medical profession and the trust that the profession placed in them. Yesterday and today the very atmosphere of the building where their offices were located was laden with grief. In the hospitals physicians and nurses, who are accustomed to death, gathered in small, quiet groups. There were few dry eyes and no light hearts. With difficulty medical students and teachers carried on. Outside the hospitals, doctors' offices, and the medical centers of the city the people in the street, even at this approaching busy, happy holiday season, seemed solemn. The corner policeman, the newsstand boy, the man in the street, each feels he has suffered a personal loss.

"The Bureau of Publicity, speaking for the members of the Indiana State Medical Association, can do little to add to the many nation-wide tributes paid these men by friends and associates, both in and out of the profession. We all can strive, however, to carry on, inspired by the ideals by which these who are now gone patterned their lives as physicians and citizens.

"December 7, 1934."

This statement was to be sent to the families of the deceased.

Request received from a social service worker in New York to be placed upon the miling list of the Bureau of Publicity. The Bureau authorized the placing of this person's name upon the mailing list, to receive the weekly releases.

Correspondence with the American Child Health Association brought to the attention of the Bureau. The American Child Health Association particularly desired to know whether or not the Indiana State Medical Association sponsors radio talks in regard to child health.

The librarian of the Indiana University School of Medicine called the attention of the Bureau to a volume, entitled "Pathological Exhibits Showing Twenty-one Classes of Criminals in Indiana State Prison," which was published in 1901 from the findings of a special committee appointed by the Indiana State Medical Association. The Bureau of Publicity thought it would be well to purchase this book for the headquarters office.

* * *

December 21, 1934.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D.; J. H. Stygall, M. D., and T. A. Hendricks, executive secretary.

Release, "New Year's Health Resolutions," approved for publication Monday, December 31.

Requests for speakers:

December 27—Grant County Medical Society, Marion, Ind., desires public entertainer. Entertainer obtained.

January 3—Monroe County Medical Society, Bloomington, Ind. Two speakers requested to talk on "State Medicine." Speakers obtained.

January 11—Woman's Auxiliary, Wayne County (Michigan) Medical Society, Detroit. Speaker obtained.

Report on medical meeting:

December 11—Rotary Club, Union City, Ind. "A Rational Health Program." Thirty-five present.

List of United States Public Health Service publications checked by a member of the Bureau and the headquarters office was instructed to write for any of the pamphlets checked which are distributed free of charge.

Request received from the head of the Indiana Methodist Hospital Association, 820 Occidental Building, Indianapolis, to be placed on the mailing list of the Bureau.

Bulletin of the Indiana Congress of Parents and Teachers containing an article, entitled "How to Live Is Biggest Problem," prepared by the assistant director of the State Division of Public Health, brought to the attention of the Bureau and approved by the Bureau.

Letter received from the director of the Bureau of Health and Public Instruction of the American Medical Association in regard to cooperation between the American Medical Association and the National Congress of Parents and Teachers and the summer roundup of children.

In Indiana there is a close cooperation between the Indiana State Medical Association and the Indiana Congress of Parents and Teachers. The Bureau felt that it could see no conflict in the plan outlined in the letter, as the children who were able to pay, paid a siutable fee for the examinations.

The radio programs advocating the socialization of medicine, entitled "Doctors, Dollars and Disease," brought to the attention of the Bureau. The Bureau considered these programs and unequivocally expresses its opposition to any form of socialized medicine as not in the interest of the public welfare and the advancement of scientific medicine.

In order to clarify any misunderstanding that might exist in the interpretation of the Bureau's ruling concerning radio broadcasting, the Bureau has amended its rule to make it more specific, and it now reads as follows, the new part being in italics:

> The Bureau has adopted a rule that no physician who is in private practice should have his name mentioned over the radio in connection with the Bureau of Publicity broadcasts, *but* the names of physicians holding public office and connected with public institutions may be mentioned over the radio, *if they are not in private practice.*

* * *

COUNTY SOCIETY REPORTS

ALLEN COUNTY (FORT WAYNE) MEDICAL SOCIETY met at the Chamber of Commerce, in Fort Wayne, January fifteenth, with Dr. John W. Thomson, of Garrett, as principal speaker. His subject was "Subcutaneous Injuries to the Liver." The Fort Wayne Medical Society has recently become a member of the Better Business Bureau.

* * *

CARROLL COUNTY MEDICAL SOCIETY AND CLINTON COUNTY MEDICAL SOCIETY members met at Frankfort, January third, in a joint meeting. Papers were read by Dr. A. G. Moore, of Deer Creek, on "Hypertension," and Dr. E. H. Brubaker, of Flora, on "Closer Cooperation Among Physicians."

CARROLL COUNTY MEDICAL SOCIETY members heard Dr. W. D. Little of Indianapolis when he was the speaker before the society at its January tenth meeting in Delphi.

* * *

CASS COUNTY MEDICAL SOCIETY members met at Logansport, December twenty-first, to hear Dr. C. B. Bohner, of Indianapolis, discuss "Modern Allergy." Attendance numbered twenty-five.

* * *

CLINTON COUNTY MEDICAL SOCIETY members met at the Coulter Hotel, Frankfort, January third, with Carroll County Medical Society members as guests. Carroll County members supplied the program (see above). Clinton County members accepted an invitation to meet with the Carroll County Society at Flora, March fourteenth, when the Clinton County Society will supply the program. In addition to the papers presented by Dr. A. G. Moore and Dr. E. G. Brubaker, Dr. H. R. Royster presented a "Potpourri of the Past," in which he told of some of his early experiences as a physician.

DAVIESS-MARTIN COUNTY MEDICAL SOCIETY members met January eighth at the Daviess County hospital in Washington for election of officers. For 1935 the officers are:
President, R. L. Kleindorfer, Washington.
Vice-President, E. E. Long, Shoals.
Secretary-Treasurer, C. P. Fox, Washington.

* * *

DECATUR COUNTY MEDICAL SOCIETY members met at Greensburg, December nineteenth, for election of officers, which resulted as follows:
President, H. S. McKee, Greensburg.
Vice-President, W. C. Callaghan, Greensburg.
Secretary-Treasurer, Charles Overpeck, Greensburg.

* * *

DEKALB COUNTY MEDICAL SOCIETY held a called meeting in Auburn, December twenty-first, with Dr. E. M. Van Buskirk, of Fort Wayne, as the principal speaker. Dr. Van Buskirk discussed "Public Social Insurance or the Panel System." Attendance numbered nineteen.

* * *

DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY members attended a dinner-meeting at the Hotel Roberts, January fifteenth, for election of officers. Reverend O. G. Myers, of Muncie, presented the plan of the Methodist Hospital Association which is launching a campaign to familiarize the laity with hospital responsibilities. Dr. O. M. Deardorff discussed the Constitution and By-Laws of the Delaware-Blackford County Medical Society.

* * *

ELKHART COUNTY MEDICAL SOCIETY met at the Hotel Elkhart, January third, with Dr. Fred Coller, Ann Arbor, Michigan, as principal speaker. Attendance numbered forty-eight.

* * *

FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY members heard Dr. Ernest Rupel and Dr. Matthew Winters of Indianapolis at the monthly dinner meeting held January tenth in Connersville. Dr. Rupel's subject was "Urological Problems" and Dr. Winters talked on "Infectious Diseases of Childhood."

* * *

FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY met with Dr. and Mrs. J. Roy Burlington, Covington, December thirteenth. Dr. E. T. Stahl, of Lafayette, talked on "Fractures Common to the General Practitioner."

* * *

GRANT COUNTY MEDICAL SOCIETY held a party at the Hotel Spencer, December twenty-seventh. This was the annual "ladies' night" party, with about sixty in attendance. Officers for 1935 were installed. In addition to the musical entertainment, J. E. Blackledge, of Indianapolis, presented a program of magic.

* * *

GREENE COUNTY MEDICAL SOCIETY officers for 1935 were elected at the dinner meeting of the society held December thirteenth at Linton. They are:
President, M. S. Mount, Bloomfield.
Vice-President, W. R. Craft, Linton.
Secretary-Treasurer, Ben Raney, Linton.

* * *

HAMILTON COUNTY MEDICAL SOCIETY met at Noblesville, January eighth, to hear Dr. William E. King, of Indianapolis, discuss "The Three Ages of Cardiac Disease."

* * *

HANCOCK COUNTY MEDICAL SOCIETY officers, elected at the December seventeenth meeting, held in Greenfield, are:
President, James R. Woods, Greenfield.
Vice-President, Charles E. McCord, Fortville.
Secretary-Treasurer, Joseph L. Allen, Greenfield.

HENRY COUNTY MEDICAL SOCIETY held a dinner meeting, December twentieth, with election of officers as follows:
President, W. U. Kennedy, Newcastle.
Vice-President, W. S. Robertson, Spiceland.
Secretary-Treasurer, George Wiggins, Newcastle.

* * *

HOWARD COUNTY MEDICAL SOCIETY members held their first meeting of the year, January fourth, at Kokomo. A motion picture on "Anesthesia" was shown. This was a dinner meeting.

* * *

INDIANAPOLIS MEDICAL SOCIETY members heard Dr. R. L. Sensenich, of South Bend, at the January fifteenth meeting. Dr. Sensenich's subject was "Some Present Problems of the Medical Profession."

* * *

JACKSON COUNTY MEDICAL SOCIETY has elected the following officers to serve this year:
President, Neal Matlock, Medora.
Vice-President, C. E. Gillespie, Seymour.
Secretary-Treasurer, G. H. Kamman, Seymour.

* * *

JAY COUNTY MEDICAL SOCIETY met at Portland, January fourth, with Dr. H. G. Hamer, of Indianapolis, as the principal speaker. His subject was "Essentials of Urinary Diagnosis." Attendance numbered fifteen.

* * *

JEFFERSON COUNTY MEDICAL SOCIETY members heard Dr. Robert Kelly, of Louisville, talk on "Skin Diseases" at the December third meeting, held in Madison. Dr. Kelly's talk was illustrated with lantern slides. Dr. Lee Palmer, of Louisville, spoke on "Diphtheria." On December thirty-first, Dr. George A. May, of Madison, presented a paper on "Ancient History of Medicine."
JEFFERSON COUNTY MEDICAL SOCIETY officers for 1935 are:
President, George A. May, Madison.
Vice-President, Anna Goss, Madison.
Secretary-Treasurer, O. A. Turner, Madison.

* * *

JENNINGS COUNTY MEDICAL SOCIETY officers for 1935 were elected at the December twelfth meeting, held in North Vernon. Officers are:
President, J. H. Green, Nortb Vernon.
Vice-President, W. H. Stemm, Nortb Vernon.
Secretary-Treasurer, D. L. McAuliffe, North Vernon.

* * *

LAKE COUNTY MEDICAL SOCIETY members heard Dr. Eric Oldberg, of Chicago, at the January tenth meeting. His subject was "Head Injuries."

* * *

LA PORTE COUNTY MEDICAL SOCIETY members met at the Spaulding Hotel, Michigan City, December twentieth, with Dr. C. Anderson Aldrich, of Chicago, as principal speaker. His subject was "Care of Nephritis in Children." Officers for 1935 were elected:
President, E. E. Linn, LaPorte.
Vice-President, F. V. Martin, Michigan City.
Secretary-Treasurer, R. A. Gilmore, Michigan City.

* * *

LAWRENCE COUNTY MEDICAL SOCIETY members met January second, at the Greystone Hotel, Bedford. Miss Gertrude Kline, director of the relief commission in Bedford, discussed the relief situation. Dr. R. E. Wynne, of Bedford, discussed state medical unemployment insurance.

* * *

MARSHALL COUNTY MEDICAL SOCIETY officers for 1935 are:
President, C. H. Bockoven, Plymouth.
Vice-President, R. C. Stephens, Plymouth.
Secretary-Treasurer, L. W. Vore, Plymouth.

MONROE COUNTY MEDICAL SOCIETY held its first session of the year at Bloomington, January third. Speakers were Mr. Albert Stump, attorney for the Indiana State Medical Association, and Thomas A. Hendricks, executive secretary.

MONROE COUNTY MEDICAL SOCIETY officers for 1935 are:
President, J. W. Wiltshire, Bloomington.
Vice-President, Mel Ross, Bloomington.
Secretary-Treasurer, Dillon Geiger, Bloomington.

* * *

MONTGOMERY COUNTY MEDICAL SOCIETY members met at Crawfordsville, December twentieth, when officers for 1935 were elected.
President, George A. Collett, Crawfordsville.
Vice-President, James Noblitt, Waveland.
Secretary-Treasurer, J. L. Sharp, Crawfordsville.

* * *

MUNCIE ACADEMY OF MEDICINE met at the Hotel Roberts, January eighth, to hear Dr. C. B. Peirce, of Ann Arbor, discuss "Chest Diagnosis."

* * *

NORTHEASTERN INDIANA ACADEMY OF MEDICINE met at the Gawthrop Hotel in Kendallville, December twentieth, for election of officers. For 1935 Dr. W. W. Swarts of Auburn was made president, Dr. H. O. Williams of Kendallville vice-president, and Dr. Frank Black of Ligonier was made secretary-treasurer.

* * *

PORTER COUNTY MEDICAL SOCIETY held its annual election of officers and a short business meeting preparatory to making plans for a new county hospital, at the December twenty-seventh meeting in Valparaiso. Officers are:
President, S. E. Dittmer, Kouts.
Vice-President, J. W. Dale, Chesterton.
Secretary-Treasurer, P. M. Corboy, Valparaiso.

* * *

POSEY COUNTY MEDICAL SOCIETY met at the Tavern in New Harmony, December fourteenth, when the following officers were elected:
President, S. B. Montgomery, Cynthiana.
Secretary-Treasurer, W. E. Jenkinson, Mt. Vernon.

* * *

RIPLEY COUNTY MEDICAL SOCIETY officers for 1935 are:
President, J. T. Carney, Batesville.
Secretary, George S. Row, Osgood.

* * *

ST. JOSEPH COUNTY MEDICAL SOCIETY met in the Oliver Hotel, South Bend, November twenty-seventh, with twenty-five members and one guest present. Dr. Henry J. Zimmer was unanimously elected to membership in the Society. Dr. J. B. Berteling discussed immunization in the schools, and the paper of the evening, "Cancer of the Eye," was read for Dr. S. R. Edwards by Dr. C. E. Savery because of the writer's illness. A paper on "Cancer of the Ear, Nose and Throat" was read by Dr. J. C. Boone.

At the December eleventh meeting, forty-three members were present. An amendment to the constitution, proposed previously, was read and explained by Dr. R. L. Sensenich. A paper on "Cancer of the Gastro-Intestinal Tract" was read by Dr. J. Wilson.

At the December eighteenth meeting of the St. Joseph County Medical Society, forty-eight members and three guests were present. This was the final meeting for 1934. Election of the members to a newly created Board of Trustees resulted in the following: For three years, Dr. H. D. Pyle; for two years, Dr. W. B. Christophel and Dr. J. V. Cassady; for one year, Dr. A. S. Giordano and Dr. S. A. Clark.

* * *

SHELBY COUNTY MEDICAL SOCIETY members and their wives enjoyed a New Year's dinner, January second, in Shelbyville.

* * *

STEUBEN COUNTY MEDICAL SOCIETY officers for 1935 are:
President, L. L. Eberhart, Angola.
Vice-President, B. A. Blosser, Fremont.
Secretary-Treasurer, Mary T. Ritter, Angola.

TIPTON COUNTY MEDICAL SOCIETY held its regular monthly meeting at the office of Dr. J. V. Carter, in Tipton, December twentieth, when the officers for 1935 were elected as follows:
President, Dr. Boyd Burkhart, Tipton.
Secretary-Treasurer, H. B. Shoup, Sharpsville.

TIPTON COUNTY MEDICAL SOCIETY and members of the Tipton County Dental Society met January twenty-first, at the Elks Home in Tipton. Dr. Edward Stahl, of Lafayette, presented a paper on "Fractures."

* * *

WABASH COUNTY MEDICAL SOCIETY members met at the Young Hotel in North Manchester, January ninth, to hear Dr. E. B. Mumford, of Indianapolis, discuss "Conditions of the Knee Joint." Attendance numbered twenty-two.

* * *

WAYNE-UNION COUNTY MEDICAL SOCIETY held its annual dinner meeting at the Reid Memorial Hospital, Richmond, December twentieth. Officers for 1935 were elected as follows:
President, J. C. Clawson, Richmond.
Vice-President, Allen Stamper, Cambridge City.
Secretary-Treasurer, Paul Blossom, Richmond.

* * *

WELLS COUNTY MEDICAL SOCIETY officers for 1935 have been elected as follows:
President, C. N. Baganz, Uniondale.
Vice-President, C. M. Gingrich, Liberty.
Secretary-Treasurer, George B. Morris, Bluffton.

* * *

WHITLEY COUNTY MEDICAL SOCIETY met at Columbia City, January fifteenth, with Dr. L. T. Rawles, of Fort Wayne, as principal speaker. His subject was "Sickness Insurance." The president of the society appointed members to talk before the local Red Cross Society, the Rotary Club, and the Lions Club on the same subject.

MR. MILBANK SPEAKS

(Continued from page 89)

to collaborate with the staff of the fund in such further studies that may be appropriate after the results of the conferences now pending in Washington under the auspices of the President's Committee on Economic Security are known.

Mr. Milbank expressed the belief that if the true nature of the proposals of the staff were understood it would be seen that instead of favoring state medicine they were intended to forestall the movement in that direction.

Mr. Milbank concluded his remarks with the statement that no one can deny that the subject of health is affected with the public interest nor can anyone deny that the practice of medicine is a gainful occupation and therefore affected with a private interest. He expressed his personal belief that if a soundly conceived health insurance plan is worked out it will be found that there is no conflict between the public interest and the private interests of the practicing physicians.

Provided there is a recognition by the medical profession that a foundation interested in promoting the public health has a right to offer proposals calculated to promote that object, and a recognition by such a foundation that the medical profession must play an all-important part in making such proposals effective, and that the private interests of the physicians must be safeguarded, a basis for mutually helpful cooperation will thereby be established.

ADVERTISERS IN THIS ISSUE

Akron Surgical House, Inc., Indianapolis xvi
Appalachian Hall, Asheville, N. C. vii
Approved Clinical Pathologists xxviii
Baxter One-Stop, Indianapolis xvii
Blake, Dr. J. M., Chicago xxx
Chateau Lido, Indianapolis iv
Chesterfield Cigarettes xxxi
Coca-Cola vii
Cocomalt—R. B. Davis Co. iv
Cook County Graduate School of Medicine, Chicago v
Commercial Announcements 56
Corn Products Refining Co., New York xiv
Craig's Candies, Indianapolis iv
Curdolac Food Company, Waukesha, Wisconsin .. xvii
Denison Service, Indianapolis xxx
Eli Lilly and Company, Indianapolis xviii
Gausepohl, E. J., Co., Indianapolis xi
Grain Dealers Natl. Mutual Fire Ins. Co., Indianapolis v
Hanger, J. E., Inc., Indianapolis xi
Home Lawn Sanitarium, Martinsville iii
Hord's Sanitarium, Anchorage, Kentucky xiii
Hynson, Westcott and Dunning, Inc., Baltimore xvi
Indiana University School of Medicine, Indianapolis xxxii
Kenilworth Sanitarium xxix
Louisville Neuropathic Sanatorium, Louisville, Kentucky xxix
Mead Johnson and Company, Evansville i
Medical Protective Company, Wheaton, Ill. xi
Milwaukee Sanitarium, Wauwatosa, Wisconsin xxxii
Morris Plan, Indianapolis ix
Neuronhurst—Fletcher's Sanatorium, Indianapolis .. xxx
Norways—Sterne Memorial Hospital, Indianapolis xi
Oconomowoc Health Resort, Oconomowoc, Wisconsin xii
Oxford Retreat, Oxford, Ohio xxix
Parke, Davis and Company, Detroit ii
Petrolagar xvii
Philip Morris and Co., New York xvi
Physicians' Directory xix
Pitman-Moore Company, Indianapolis xii
Plymouth Sanitarium, Plymouth, Ind. vii
Searle, G. D. and Co., Chicago vii
Simpson Institute of Radium Therapy, Chicago xiii
Squibb, E. R. and Sons, New York xv
Stokes Hospital, Louisville, Kentucky v
Union Trust Co. of Indianapolis xi
Waukesha Springs Sanitarium, Waukesha, Wisconsin xxix
White-Haines Optical Company, Indianapolis vii
Wilson's Milk, Indianapolis xxx

BOOK REVIEWS

BOOKS RECEIVED:

THE DOCTOR IN HISTORY. By Howard W. Haggard, M. D., Associate Professor of Applied Physiology in Yale University. Author of "Devils, Drugs, and Doctors," and "The Lame, the Halt, and the Blind." 408 pages. Illustrated. Cloth. Price $3.75. Yale University Press, New Haven, Connecticut, 1934.

* * *

SYSTEM OF DIET WRITING. Including Diet Calculator, Obesity Chart, Diet Formulary, and 100 Menu Prescription Forms. By William S. Collens. B. S., M. D., Brooklyn. Loose-leaf book with rigid back. Price $5.00. Form Publishing Company, New York City, 1933.

* * *

BODY MECHANICS IN THE STUDY AND TREATMENT OF DISEASE. By Joel E. Goldthwait, M. D., LL. D., Lloyd T. Brown, M. D., Loring T. Swaim, M. D., and John G. Kuhns, M. D. 281 pages, with 99 illustrations. Cloth. Price $4.00. J. B. Lippincott Company, Philadelphia and London, 1934.

* * *

THE AUTONOMIC DISEASES OR THE RHEUMATIC SYNDROME. By T. M. Rivers, M. D. 299 pages. Cloth. Price $3.00. Dorrance and Company, Inc., Philadelphia, 1934.

* * *

TREATMENT BY DIET. By Clifford J. Barborka, M. D., Department of Medicine, Northwestern University Medical School, Chicago. 615 pages, illustrated. Cloth. Price $5.00. J. B. Lippincott Company, Philadelphia and London, 1934.

* * *

SCULPTURE IN THE LIVING. Rebuilding the Face and Form by Plastic Surgery. By Jacques W. Maliniak, M. D., Formerly Major, Reconstructive Hospital, Allied Armies, etc. Foreword by Wendell C. Phillips, M. D. 203 pages, illustrated. Cloth. Price $3.00. The Lancet Press, New York, 1934.

* * *

INTERNATIONAL CLINICS. Volume IV., Forty-fourth series, 1934. Edited by Louis Hamman, M. D. J. B. Lippincott Company, Philadelphia and London, 1934.

* * *

MINOR SURGERY IN GENERAL PRACTICE. By W. Travis Gibb, M. D., consulting surgeon, City Hospital and Central and Neurological Hospitals, New York. 429 pages, illustrated. Cloth. Paul B. Hoeber, Inc., New York. 1934.

* * *

PERIODIC FERTILITY AND STERILITY IN WOMAN. A Natural Method of Birth Control. By Professor Dr. Hermann Knaus. Authorized English translation by D. H. Kitchin and Kathleen Kitchin, London. Published by Wilhelm Maudrich, Vienna. Available in United States of America and Canada through the Concip Company, Hobart, Indiana. 162 pages. Cloth. Price $6.00

Commercial Announcements

LOCATION AVAILABLE FOR SALE OR LEASE: An ideal location for a group of physicians or a clinic. Well constructed, attractive building with ample parking space. Centrally located between Methodist and St. Vincent's Hospital, Indianapolis, Indiana. Address P. O. Box 368, Indianapolis, Indiana.

ASSISTANCE TO MEDICAL WRITERS. Research, Abstracts, Translations (all European languages). Papers prepared. All work done personally. Ten years' medical literary experience with institutions and leading journals. Florence Annan Carpenter, 413 St. James Place, Chicago, Illinois.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

OFFICE OF PUBLICATION: 1021 Hume Mansur Bldg., INDIANAPOLIS, INDIANA

VOLUME 28 MARCH, 1935 No. 3

ORIGINAL ARTICLES

TREATMENT OF EXTENSIVE CUTANEOUS BURNS

Ultraviolet Light As An Adjunct to the Repair of Burn Defects*

HAROLD M. TRUSLER, M. D.
INDIANAPOLIS

Extensive burns are always serious injuries, often fatal. Too often the patient who survives must undergo a distressing ordeal of suffering, disfiguration, and deformity. These facts call for persistent efforts toward improved methods of treatment.

Numerous treatments have been prescribed, and extravagant claims have been made concerning the special merit of various remedies. Many of these claims are based upon results obtained in treating burns of minor degree which naturally exhibit an ability to heal spontaneously, irrespective of treatment. It would seem obvious that such observations can be of little value in combating the mortality and the distressing morbidity of major burns. Successful management of these problems will tax the skill and ingenuity of the most experienced operator.

It should be apparent, furthermore, that there is no single ideal treatment for burns and no one procedure applicable to all phases of the problem. It must be admitted that even with the best of treatment there is unavoidable mortality and unpreventable morbidity attendant upon extensive burns. In general it may be stated that the mortality depends chiefly upon the extent of burned surface; the deformity or disfiguration depends upon the location and depth of tissue destruction. Admitting these basic facts, it is true, nevertheless, that much depends upon treatment. Lives may be saved and countless distressing complications prevented or relieved by effective therapeutic measures. It is the purpose of this paper to outline a plan of treatment discussing three phases of the subject.

I. INITIAL TREATMENT

In the initial treatment of an extensive burn, the first consideration is the hope of saving life. Burns may be fatal from any one of several causes. The most important are:

1. Burn shock or toxemia.
2. Pneumonia.
3. Nephritis.
4. Sepsis or uncontrolled infection.
5. Pulmonary embolism.

Concerning the nature of the acute burn shock or toxemia, there has been much speculation. Deaths from this cause occur in the first twelve to forty-eight hours with circulatory collapse, cyanosis, dyspnoea and coma. The temperature may be subnormal or, especially in children, may mount rapidly to a hyperpyrexia. The appearance is similar though not identical to the picture of traumatic shock. Blalock[1] has shown experimentally that the fall in blood pressure and the concentration of the blood can be explained by loss of fluids into the burned area. He does not deny the possibility of toxic absorption but asserts that the shock manifestations are explainable purely on the basis of blood plasma lost into the tissues. The question as to whether toxins absorbed from the burned area contribute to this picture has never been settled. Robertson and Boyd[2] have reported that the

* Presented before the Section on Surgery of the Indiana State Medical Association at the Indianapolis session, October 10, 1934.

From the Department of Surgery, Division of Research, Indiana University School of Medicine.

[1] Blalock, Alfred: Experimental Shock—The Importance of the Local Loss of Fluids in the Production of Low Blood Pressure after Burns. *Arch. Surg.* 22:610-616, April, 1931.

[2] Robertson, B., and Boyd, G. L.: Toxemia of Severe Superficial Burns. *J. Lab. and Clin. Med.* 91, 1923.

intravenous injection of extracts of burned skin into guinea pigs caused the animals to develop symptoms of toxemia. Underhill and Kapsinow[3], however, were unable to corroborate this finding.

Upon careful clinical observation the shock manifestations are quite apparent, but one is impressed that many cases present the picture of a violent allergic reaction terminating in shock. The use of tannic acid (Davidson),[4] which supposedly prevents the absorption of toxins, has given encouraging results but in large numbers of cases has not been effective in preventing the acute deaths from burns.

Treatment in this stage should be directed primarily toward the systemic condition. Intravenous fluid should be supplied very promptly and administration should be almost continuous. Glucose and physiologic sodium chloride should be the basic constituents, with Hartman's solution or acacia as adjuncts. Blood transfusions are also important. Adrenalin or atropine in appropriate doses are indicated if allergic symptoms or pulmonary edema appear. It should be realized that, in extensive burns, these shock-combating measures are indicated early, before the appearance of a moribund state. Often, however, it is apparent after death that such measures have been omitted or inadequately applied. It is true that the most heroic treatment may fail. Few patients survive a burn which involves more than half the skin surface, regardless of the depth of tissue destruction.

The allergic manifestations frequently seem most pronounced in the most superficial burns. I have seen a boy of six years die in this way, within eighteen hours, from a hot water scald covering approximately half the skin surface, but so superficial that, had recovery occurred, he should have healed without a scar. In another instance a girl of fourteen years was admitted to the Riley Hospital in shock a few hours following a deep third degree burn involving sixty percent of her body surface. With vigorous intravenous therapy she survived the shock stage, only to die in one week from acute nephritis with suppression of urine and toxic degeneration of all parenchymatous tissues. In both these cases the burned tissue was promptly "fixed" by treatment with tannic acid. I mention this not to berate the use of tannic acid. It is obvious that the value of any agent is enhanced by an appreciation of its limitations.

Tannic acid properly applied does offer tremendous advantages in the management of most extensive burns. Its disadvantages may be discussed in a few words. I have not found its use either pleasant or efficacious in the treatment of burns involving the eyelids, the mouth, the neck, the hands, or the perineum. In these areas the crusts produced by tannic acid treatment are usually painful and easily become infected. These areas react much better to treatment with mild antiseptic wet dressings.

It has been said by some that tannic acid devitalizes tissue which otherwise would not slough and others have maintained that its use always invites infection. Such observations would seem to be unfounded or based upon improper methods of application. In regard to this, the chief difficulties with tannic acid result from efforts to use it superimposed upon some other application. When a burn occurs, be it small or large, it most frequently receives at the hand of someone a hurried first aid treatment with some sort of grease. In cases of minor burns no harm is done, and the treatment may be quite efficacious. With major burns, however, this first aid dressing is often the first step in defeating a rational plan of treatment. The information should be broadcast that the most kindly first aid dressing for a large burn requires only a dry and sterile or at least a *clean* protective covering for the burned area. Certainly this is true if tannic acid is to be used. It is possible to remove one of the aforementioned grease dressings with ether or other solvent, and to proceed thereafter with tannic acid application. If, however, the patient comes under observation after several days of other treatment with the burned tissue sloughing and infected, it is far better to omit tannic acid and to institute at once a wet dressing or salt solution tub management. Blair, Brown, and Hamm[5] have described an excellent regime of this type.

As an initial treatment, however, the advantages of tannic acid when promptly and properly applied are quite apparent. It obviates many painful dressings. As Little[6] states, it converts a wet gangrene into a dry gangrene, when properly applied, thereby actually reducing the tendency to sepsis. It is not the purpose of this paper to elaborate upon the technique of application. There is on the market a tannic acid jelly which is effective and convenient. If the freshly prepared aqueous solution is used, it must be applied or sprayed on to the burned area repeatedly. It may require twenty-four to forty-eight hours for complete tanning during which time the patient should be protected with sterile sheets and a "heat cradle." Wells[7] has described an excellent method of tannic acid application which involves placing the patient in a tub of tannic acid solution more or less continuously until the burned tissues are thoroughly "fixed."

After the initial treatment, the subsequent course depends upon the depth of the burn. As many as seven degrees of burn have been described, but a practical conception requires three.

A first degree burn involves only the cuticle. It

[3] Underhill, F. P., and Kapsinow, R.: The Alleged Toxin of Burned Skin. *J. Lab. and Clin. Med.* 16:823-830, May, 1931.

[4] Davidson, E. C.: Tannic Acid in the Treatment of Burns. *Surg. Gyn. Obst.* 41:202, 1925.

[5] Blair, V. P., Brown, J. B., and Hamm, W. G.: Early Care of Burns and Repair of Their Defects. *J. A. M. A.* 98:1355-1359, April 16, 1932.

[6] Little, W. D.: Treatment of Cutaneous Burns. *J. Ind. St. M. A.* 24:415-417, August, 1931.

[7] Wells, D. B.: Aseptic Tannic Acid Treatment of Diffuse Superficial Burns. *J. A. M. A.* 101:1136-1138, October 7, 1933.

may blister but heals without scar. In this case the tanned membrane remains undisturbed until in a week or ten days it separates spontaneously, leaving a healed surface.

A second degree burn involves partially the growing layers of the skin. It likewise heals readily, epithelium growing from many papillary points and glandular elements in the undestroyed skin. The scarring is slight. Here the tannic membrane comes away more slowly, and unless infection supervenes should be left for spontaneous separation in two or three weeks.

A third degree burn destroys the entire thickness of the skin and more or less underlying structure. In such a case healing must occur by granulation tissue, from which the tanned crust will separate in approximately a month leaving a surface practically ready for skin grafting. If at any time there is infection or septic accumulation under the crust it should be soaked loose. The care of the granulating wound constitutes the next stage of the treatment.

II. USE OF ULTRAVIOLET LIGHT IN THE PREPARATION OF GRANULATION TISSUE FOR SKIN GRAFTING

In a previous paper, Dr. Gatch[8] and I have discussed this subject in detail. We feel that the use of ultraviolet light is a most valuable procedure in preparing granulation tissue to receive skin grafts. This is especially true in the patients who come under observation in a septic state with granulation tissue infected, edematous, and unhealthy.

In this stage patients may die from sepsis; much unnecessary suffering, disfiguration, and disability will occur as the result of delayed healing. It is here that skillful management may expect to accomplish truly gratifying results. Treatment must include both local and systemic measures. Repeated blood transfusions are of the greatest value in raising the general resistance of an anemic or debilitated patient.

As for the local treatment to infected granulation tissue, the daily exposure to ultraviolet ray is, in our experience, the one procedure of greatest advantage. The care of the granulating wound also includes intermittent soaking in normal or hypertonic salt solution with continuous wet dressings of one-half percent chlorazene or other mild antiseptic solutions. In order to insure against misinterpretation, I wish to state here that I am heartily in sympathy with the view that strong antiseptics are always contra-indicated on raw surfaces. It should be obvious that any agent capable of destroying bacteria in tissue is most liable to do far more harm than good by devitalizing the tissue. A dressing of sterile gauze kept moist with physiologic solution of sodium chloride is much more likely to facilitate healing. This does not mean, however, that mild antiseptics have no value. Experience has shown that there are bacteriostatic agents which do not devitalize tissue, but which nevertheless effectively discourage bacterial growth in surface exudates. I have found this to be true of merthiolate solutions, the dilution ranging between 1 to 1000 and 1 to 5000 in normal salt. The dressings are changed daily at the time of exposure to ultraviolet light. The light treatment includes both close range exposure for the granulation tissue and systemic radiation of the entire body. Accurate judgment of the necessary duration and number of treatments is acquired only by experience.

The duration of any one close range exposure may be as great as five minutes where the granulations are in a bad state, the time being reduced to one or two minutes daily as the surface improves. The proper reaction is one which renders the granulations firm, red, vascular and surprisingly free from exudate.

When Thiersch grafts are placed upon such a surface a practically one hundred per cent "take" may be expected. The dressings for grafted areas have been described in detail in a previous publication.[8] When the area of granulation has been so large as to necessitate wide scattering of the grafts, the post-operative use of ultraviolet light will greatly facilitate healing of the intervening raw surface. Cases 1 and 2 illustrate this point convincingly.

ADVANTAGES OF EARLY THIERSCH GRAFTING

The benefit which is derived from the early Thiersch grafting of large granulating surfaces is easily apparent. In the first place, extensive raw areas unassisted may never heal. In any case the epithelial covering resulting from successful Thiersch grafting is far superior to the cicatrix which must result from prolonged granulation. Such treatment should also prevent most contractures of burned extremities. As an aid in this, splints are indispensable.

In many cases subsequent plastic operations may be desirable or necessary. This is especially true of burns involving face, neck, axilla or hands.

III. CORRECTION OF DISFIGURING SCARS AND DEFORMING CONTRACTURES

This phase of the treatment requires more specialized plastic operations. Ordinary Thiersch grafts are indispensable in the covering of large areas in that they grow readily and cause no distortion of the donor area. They do not, however, give good cosmetic results on the face and neck, and they are not always effective in preventing contracture of flexor folds.

The procedures necessary for correction of such defects will vary. Ordinary "Z plasty" is a fairly

[8] Gatch, W. D., and Trusler, H. M.: Use of Ultraviolet Light In the Preparation of Infected Granulation Tissue for Skin Grafting—The Value of Very Thick Thiersch Grafts. *Surg. Gyn. Obst.* 50:478-482, February, 1930.

simple procedure often effective in relieving contracture. Good repairs may be obtained frequently by means of large thick Thiersch grafts sutured in place following the excision of cicatrix. Full thickness skin transplants and pedicle grafts give the best cosmetic results. They have the disadvantage of scarring the donor area; full thickness grafts are of uncertain viability; pedicle grafts are expensively time-consuming, and offer difficulties of manipulation. There are, however, many hideous scars which can be relieved only by these major plastic procedures. The accompanying clinical photographs, with brief case reports, are offered as typical illustrations of burn scar deformities and the possibilities of satisfactory reconstruction.

SUMMARY

1. The problem of major burns has been discussed in three phases:
   (a) Initial treatment, both local and general.
   (b) Preparation of granulation tissue for successful Thiersch grafting.
   (c) Major surgical reconstruction of scar deformities.
2. Tannic acid is of great value as an initial treatment, but has objectionable features and definite limitations.
3. The use of ultraviolet radiation is a most valuable adjunct to successful skin grafting on granulation tissue.
4. The intelligent use of mild antiseptics is likewise of great importance in the control of infection.
5. Photographs and case reports illustrate the possibilities of surgical reconstruction for scar deformities.

CASE REPORTS

CASE I—ILLUSTRATING THE VALUE OF ULTRAVIOLET LIGHT THERAPY

This patient, J. F., a girl 23 years of age, fell in front of an open fire March 9, 1931, and suffered a third degree burn of the entire back. For one month she was treated at her home by her family physician. She was then taken to a hospital with the large area of granulation tissue in fair condition. After several days of careful preparation with mild antiseptic wet dressings and exposure to ultraviolet light once daily, numerous large Thiersch skin grafts were scattered over the raw area as shown in "A."



Case I-A Case I-B

At the end of five days it was apparent that the grafts all were viable and the girl's parents wished to take her home. A plan of treatment was outlined to include continuous wet dressings with daily exposure to ultraviolet light.

Three months later I was again called in consultation. The ultraviolet light had not been supplied. Vaseline gauze dressings had been substituted in place of antiseptic wet dressings; the grafts fortunately were still in place, but there had been no further growth of epithelium. The intervening granulations were indolent, edematous and badly infected. She was almost moribund from sepsis.

At this time she was admitted to the Robert W. Long Hospital. A regime of continuous wet dressings with daily exposure to ultraviolet light was instituted at once. She was given a blood transfusion. Her general condition gradually improved. The granulations became firm and healthy.

Plans were made to place more skin grafts. The epithelium, however, grew so rapidly in all directions from the grafts already in place that no additional grafting was necessary.

Two months from the date of her admission to the Long Hospital, healing was practically complete as shown in "B." Recent communication informed me that her back has remained healed with a good epithelial covering.

CASE II—ILLUSTRATING THE USE OF THE ULTRAVIOLET LAMP



Case II

The exposure is given once daily, close range therapy to the raw areas and additional systemic radiation as tolerated.

The child shown in the photograph had a third degree burn of the entire back, which healed rapidly following the scattered application of a few large Thiersch grafts.

CASE III—CORRECTION OF DEFORMITY DUE TO BURN SCAR CONTRACTURE

This case illustrates the bad result following spontaneous healing of a third degree burn of the leg. The physician referring this patient to the Riley Hospital remarked that healing was satisfactory, but the boy refused to straighten the leg.

On physical examination it was quite evident that contracture of the knee and hip made it impossible for the boy to place the leg in any position other than that shown in "A."



Case III-A Case III-B

In order to straighten the leg it was necessary to excise entirely the web on the posterior surface and sever the tendons in the popliteal space. The large raw area, because of its irregular contour, was allowed to granulate for ten days, during which time extension was maintained with splints.

The final result obtained with closely placed thick Thiersch grafts is shown in "B." The leg has normal function.

CASE IV—ILLUSTRATING CORRECTION OF WEB CONTRACTURE OF ARM DUE TO BURN SCAR



Case IV-A (Upper) Case IV-B (Lower)

This boy was admitted to the Riley Hospital with healed burn scar of the arm as shown in "A." By means of a modified Z-plasty the scar was excised so that the arm could be extended; flaps from each side were sutured together so as to cover the cubital fossa and at the same time two large split skin grafts were sutured into the remaining raw surfaces. "B" shows the result a few weeks after healing. The arm has normal function.



Case V—A Case V-B Case V-C

CASE V—REPAIR OF NECK CONTRACTURE BY PEDICLE GRAFT (Description on next page)

CASE V—REPAIR OF NECK CONTRACTURE BY PEDICLE GRAFT

This child. M. L., when five years of age, was admitted to the Riley Hospital for repair of burn scars involving the face, neck and chest as shown in "A." This photograph, however, does not adequately portray the disfiguration. The neck was replaced by a web of scar tissue which attached the chin to the chest wall and any effort to extend the neck pulled the mouth open, everting the mucous membrane of the lower lip.

"B" shows an intermedial stage with a pedicle flap from the chest wall replacing the neck cicatrix.

"C" shows the final result two years after first admission, during which time the reconstruction was accomplished by multiple stage operations.

CASE VI—SLIDING FLAP GRAFT



Case VI—A Case VI—B

A. Burn scar contracture of neck and face.

B. Reconstruction of neck and correction of deformity by sliding a double pedicle flap from the chest wall.

CHRONIC NON-TUBERCULOUS LUNG INFECTIONS—DIAGNOSIS*

J. O. PARRAMORE, M. D.
CROWN POINT

In the general practice of medicine one is frequently called upon to decide the seriousness of some chest condition. Knowing the frequency of pulmonary tuberculosis, and the importance of its early recognition, the physician's attention is rightly placed on the possibility of its presence when making an examination of the lungs. There are, however, chronic infections of the lungs that simulate tuberculosis, and the differential diagnosis is often confusing.

It is the purpose of this paper briefly to review the clinical findings in some of the chronic infections found in the lung.

Pulmonary tuberculosis is the most frequent chronic condition encountered in the lungs, and it is most imperative to know of its existence or non-existence when pulmonary pathology is suspected. It may be the sole cause of the patient's trouble, or it may be associated with other lung conditions. When associated with other conditions, the presence of activity or non-activity is essential, and requires a period of close observation. The diagnosis of pulmonary tuberculosis, even in the advanced stage, is not always an easy procedure. The examination of the sputum for tubercle bacilli should never be omitted, and will often make the diagnosis without the necessity of further work.

The constitutional symptoms are not characteristic and may be found in many other diseases, such, for example, as exist in toxic thyroid and endocarditis. It is the localizing symptoms—pain, cough, expectoration and haemoptysis, which draws the attention to the lungs. Whenever symptoms are present a careful history will often bring its reward in clearing up an obscure diagnosis. The writer had this experience recently in a case of silicosis, the history bringing out the fact that the patient, a mill worker, with a suspected tuberculosis of the lungs, ten years previously had worked as a molder in a foundry.

Tuberculosis is nearly always found in the upper half of the chest, and the presence of physical signs, especially moist rales that are found to persist for a week or more, should demand further study by x-ray examination. A pleural effusion, for which no other cause can be found, should be treated as a tuberculous condition. The proper interpretation of shadows on the x-ray film is one of the greatest advances made in the diagnosis and treatment of pulmonary tuberculosis. Whenever a serious condition of the lung is suspected, a chest plate should always be part of the physical examination.

Non-tuberulous chronic lung infections, associated with infection in the upper air passages, are relatively common, and must be differentiated from pulmonary tuberculosis. They closely simulate this condition in symptomatology, physical signs, and clinical manifestations. The x-ray findings are sometimes very similar to those found in certain types of tuberculosis of the lungs. The differential diagnosis is highly important and very often is not a simple matter. Many of these people have had a wrong diagnosis, often are sent away for many months, when the chief cause of their trouble was not located in the lungs, but somewhere in the upper air passages.

These patients present themselves for examination, usually because of a run-down condition. They are underweight and are easily tired, and have to push themselves to get things done. They often complain of cough, which is frequently productive, and may show small streaks of blood. A physical examination of the lungs may reveal nothing, but usually rales are heard, sometimes during the period of observation. These rales may be heard in any part of the lungs, but are most frequently

* Presented before the Medical Section of the Indiana State Medical Association at the annual session in Indianapolis, October 10, 1934.

found in the lower lobes. As a rule the rales are not constant. One day they are very distinct, and on the next examination no abnormal signs can be found. Under a period of observation these patients are nearly always found to lack the presence of a toxemia, so frequently seen in active pulmonary tuberculosis. The temperature is normal and the pulse not rapid. This is not the case with active tuberculosis in which the temperature is always elevated and is slow in returning to normal after exercise. The pulse in active pulmonary tuberculosis is nearly always rapid, the range being very much out of proportion to the amount of fever present.

Special examinations are frequently negative but are necessary when other means fail to clear up the diagnosis. Repeated sputum tests should be done. In young indivduals the tuberculin test will often rule out tuberculosis. Even in patients of middle age or older, a negative tuberculin test will frequently be discovered. The red cell sedimentation rate is of some value. In active tuberculosis it is usually rapid, whereas in these conditions it is normal or slightly above normal. The x-ray film does not, as a rule, reveal parenchymal changes. There is usually a slight enlargement of the hilus shadows and an increase in the linear markings. Very frequently the costo-phrenic angle may be partially obliterated, showing the presence of a pleurisy. Direct examination of the nose and throat, and x-rays of the sinuses are routine.

Closely associated in symptomatology to pulmonary conditions, caused by infection in the upper respiratory tract, is a basal infection of the lung, caused by the influenza bacillus, streptococci, and diplococci. This type of infection has an acute or subacute onset. The patient is sick for a few days and then is up and back to work. He is left with a cough which persists, and he fails to pick up generally. An examination of the lungs reveals moist rales at one or both bases. The temperature and pulse are a little above normal. Repeated examinations of the sputum are negative for tubercle bacilli. The x-ray film of the lungs often reveals nothing, but will sometimes show small scattered areas of soft density and slight cloudiness at the bases.

The course of these patients is variable. After being forced to rest, most of them recover. In others the infection persists and goes on to a true bronchiectasis. The following case history is a good example of this type of infection:

Mrs. Q. Age 24. Housewife. One parent had a chronic tuberculosis. Patient's general health had been under par for about one year. Two weeks before first seen, she developed a cough with copious expectoration, streaked sputum, chills, fever, and night sweats. Physical signs showed numerous moist rales over the lower half of both lungs. The sputum was negative on elght examinations. Patient was put to bed and kept at complete rest. The signs persisted in the lungs for three months. She gained weight and strength, and was in apparently good health six months after the onset of her infection.

LUNG ABSCESS

An abscess of the lung in the acute stage affords very little difficulty in diagnosis. It is always secondary to some infection or follows some surgical procedure, especially an operation upon the upper respiratory tract, following an attack of pneumonia or the removal of tonsils. There are chills, high temperature, and following a hard coughing spell, a large quantity of foul smelling pus is expectorated. If rupture into a bronchus does not occur, the x-ray will reveal an area of density in the lung, usually in one of the lower lobes.

It is the chronic case which is frequently seen in clinics that affords more difficulty in diagnosis. These cases have often persisted for months and sometimes for years. Their general health may be fairly good and they are often able to carry on with their usual duties but are never quite well. They frequently have an annoying cough and at times raise small quantities of foul sputum. In some cases these chronic abscesses are associated with bronchiectasis, silicosis, and malignancy of the lung.

A physical examination is not of great value except to reveal the presence of a consolidated mass of the lung. X-ray is of value in the same manner except that it helps more readily to rule out other conditions. The history of the case will usually help to clear up the diagnosis. To reiterate, practically all of these patients will give a history of respiratory infection, followed by symptoms of infection in the lungs, or that they have become ill with a chest condition following some surgical procedure. The following history illustrates the importance of a careful interpretation of the past history as an aid in diagnosis.

Mrs. N. O. Age 45. Schoolnurse. No history of contact with tuberculosis. Past history of nephritis and pyelitis in 1915 and 1928. Present illness began after the last attack of pyelitis in 1928. She began to notice a cough with thick yellow expectoration, often tinged with blood. The patient continued to work all winter but her health gradually became worse. She later developed pain in the right chest posteriorly, which was aggravated by cough. Her temperature ranged to 101, there were night sweats, loss of weight and loss of strength. Physical examination of the lungs revealed dullness with harsh breath sounds over the upper right lobe. There were no rales made out. Repeated sputum examinations were negative. A tentative diagnosis of tumor of the lung was made and a bronchoscopic examination advised. During the bronchoscopic examination, a slight amount of pus was aspirated. A small piece of tissue from the bronchus wall was taken out for biopsy. A report was negative for lung tumor. Following the bronchoscopic examination the patient became acutely ill for several days with an increase in expectoration, high fever, and a spread of the inflammatory process in the lung. On postural drainage, the condition gradually cleared. The patient was able to return to work in several months. A final diagnosis of lung abscess was made. An important part overlooked In this patient's illness, as the direct cause of the pulmonary condition, is the history of the preceding pyelitis.

"Bronchiectasis," Hedblom states, "next to tuberculosis is the most frequent chronic condition found in the lungs." The text book picture of this condi-

tion, showing a hopeless patient with a septic look, harassing cough, and a copious, foul expectoration, is seen frequently enough, but more often it is overlooked in its milder forms.

Patients who have had whooping cough, pneumonia, pleurisy or influenza, and who develop a chronic cough, should be suspected of having a bronchiectasis, and in those patients with a chronic sinus infection with symptoms and signs of an associated bronchitis, a careful search for the presence of an obscure bronchiectasis is essential. It is found in many patients who have in the past been treated for bronchitis, asthma, and tuberculosis.

An understanding of why the bronchial tree dilates is of interest. It is thought by some observers that there must be present a congenital weakening of the bronchial wall before a true bronchiectasis can take place.

Clinical experience shows, however, that in many the causes are mechanical in nature and may be intrabronchial and extrabronchial, producing some degree of occlusion of the bronchus. This may be caused by enlargement of the lymph nodes, tumors, foreign bodies, etc. The importance of past infections of the bronchial tree causing a damage to the bronchial wall is a paramount factor in the ultimate bronchiectatic case.

In studying the histories of these cases, one of two things is noticed in the manner of the onset of the condition. Quite a few will appear to have a sudden onset, following an attack of pneumonia or influenza. The patient develops a productive cough with foul smelling sputum often tinged with blood.

The following case history is a good example of bronchiectasis coming on suddenly after an attack of pneumonia.

S. R. Age 15. Schoolgirl. No tuberculosis contact. Past illnesses: measles, mumps and chickenpox. Present illness: At age of 13 patient had an attack of pneumonia. She was acutely ill for one week. After her crisis she was left with a productive cough, raising large amounts of sputum. Her condition has gradually become worse. There has been frequent small haemoptyses, and ten days before being seen, she had a large pulmonary hemorrhage. Artificial pneumothorax was instituted to control the bleeding. Examination showed a poorly nourished young girl with slight cynaosis of the extremities. The lung revealed moist rales over the lower left lobe. Repeated sputum examinations were negative for tubercle bacilli. Red cell sedimentation rate was normal. Temperature range was from 97 to 99.6 over a period of one month. Pulse range was slightly above normal. The tuberculin test was negative up to .1 mgm. of tuberculin. An x-ray showed enlargement of the descending trunks on the left. There were no parenchymal changes in the upper part of the chest. Lipiodol injection of the lung was not made, not being necessary for diagnosis.

S. S. Female. Age 15. Schoolgirl. No history of a tuberculosis contact. Patient had pneumonia at age of five, followed by empyema, which drained for a long time. Her health was then fair until the age of 14, when she began to cough and expectorate, her sputum often containing small quantities of blood. There was a loss of weight and attacks of chilly sensations and sweating. She was referred to the chest clinic as a tuberculosis suspect. A physical examination of the chest showed moist rales over the upper two-thirds of the right lung. The sputum was negative for tubercle bacilli on 20 examinations. The diagnosis offered considerable difficulty as the lesion was located in the upper part of the chest, and the symptoms and signs were similar to a tuberculosis. A tuberculin test was negative. Lipiodol injection of the lung revealed the true nature of the condition.

The other type, of much longer duration and which is more frequently seen, gives a history beginning usually in childhood. Those who have come in contact with this condition can not fail to recognize the importance of early sinus disease as the underlying factor in producing bronchiectasis. The condition of the sinuses is frequently overlooked in treating the more acute conditions, such as a middle ear infection. The true source of the focus of infection remains long after the acute condition of the ears has subsided. This chronic condition of the sinuses remains for years, and often for life.

Children with such a condition present are troubled with frequent attacks of bronchitis at the least provocation. Almost any exposure, wet feet, sudden changes in temperature, swimming, etc., will bring on an attack of coughing, associated with expectoration and post nasal discharge. Eventually the bronchial walls become weakened and dilatation of some part of the bronchial tree occurs.

History of measles, whooping cough or some other acute infectious disease is frequently followed by a typical picture of bronchiectasis. The cause of bronchiectasis may be attributed solely to the acute infection, but a careful history usually reveals the fact that the patient has had an associated chronic sinusitis of long standing.

The following is a good example of this type of bronchiectasis:

M. F. Age 7. Schoolgirl. Referred to the chest clinic as a tuberculosis suspect. No history of contact with tuberculosis. Past history: measles in infancy and two attacks of otitis media at age of 5, followed by an attack of whooping cough. Present illness: When first seen patient gave a history of frequent colds during the past two years. These colds seemed to come on every winter and were protracted. Associated with the colds was copious expectoration. The temperature range was from 97-99.4, and the pulse range was slightly above normal. A physical examination of the lungs revealed moist rales over both bases, more pronounced on the left. X-ray showed increase in the hilus shadows and enlargement of the descending trunks. Tuberculin test negative up to .1 mgm. of tuberculin. A diagnosis of bronchiectasis was made on the history of the case, physical findings and appearance of the x-ray plate, and the absence of any evidence of tuberculosis.

These patients are usually in fairly good health, and especially is this true in children. Many cases in the young are overlooked on this account, whereas if a correct diagnosis were made and proper treatment were started early in the disease, the typical case of bronchiectasis seen later in life might be avoided.

The symptoms are similar to tuberculosis, except that toxemia is not as pronounced; the pulse very rarely is elevated except in advanced cases, and the blood pressure is not low, which is always true in tuberculosis. It may occur in any part of the chest, but is nearly always found in the bases of the lungs. There are no tubercle bacilli present.

In a case of bronchiectasis little or nothing abnormal may be made out on the x-ray plate. Usually the only finding is a noticeable increase in the width of the trunks running to the bases or in a particular area, but even this may be absent. In such a condition the demonstration on the x-ray film of the absence of tuberculosis, the history, symptoms and sputum analysis, together with the possible thickened trunks on the x-ray film, make the diagnosis for us. The x-ray films made after lipiodol injections greatly aid in the diagnosis, and are the only means we have sometimes of finding out the real nature of the condition present.

THE MANAGEMENT OF FRACTURES OF THE NECK OF THE FEMUR

E. B. RUSCHLI, M. D.
H. G. SICHLER, M. D.
LA FAYETTE

Fractures of the femoral neck have been known for many years to give decidedly poor results in comparison with those obtained in fractures located elsewhere, and this largely irrespective of the method by which they are treated. While it is not possible to determine the actual number of cases in which bone union fails to occur, it is estimated by George and Leonard[1] that 60 per cent to 70 per cent of all fractures of the femoral neck result in non-union. It is evident that the amount of complete or partial disability resulting from these ununited fractures must be very great.

The unsatisfactory response to treatment of these fractures is usually attributed chiefly to two factors: first, that they occur mainly in older people; and, second, that there is an assumed scanty blood supply to the femoral head through the vessels of the ligamentum teres so that a fracture through the neck may result in cutting off the circulation to the head and upper portion of the neck.

In regard to age there is probably some lessening of the healing power with advancing years, but age alone does not explain why non-union occurs more commonly in the femoral neck than in fractures of other regions in the aged. The supposedly poor blood supply of the head of the femur has probably some basis in fact, although the sufficiency of the teres vessels is still an unsettled question. In any case a prompt anatomical apposition of the raw neck surfaces should result in a reunion with the vascular spaces of the distal fragment which would meet all circulatory requirements.

[1] George, Ariel W., and Leonard, Ralph D.: A Cassette with a Convex Curve. *Am. Jr. Roentgenol. and Rad. Ther.* 28:261-263 (August, 1932).

It is this prompt and complete apposition of the fractured neck surfaces which constitutes the primary requirement for bony union, which must be brought about for treatment to be successful. The fact that most fractures of the femoral neck are intracapsular and the bone surface covered with a synovial membrane makes it much more necessary than in most other fractures that the raw fracture surfaces should be brought into as nearly complete anatomical apposition as possible because the synovial covering prevents the formation or attachment of callus at any point except the fresh, broken surface.

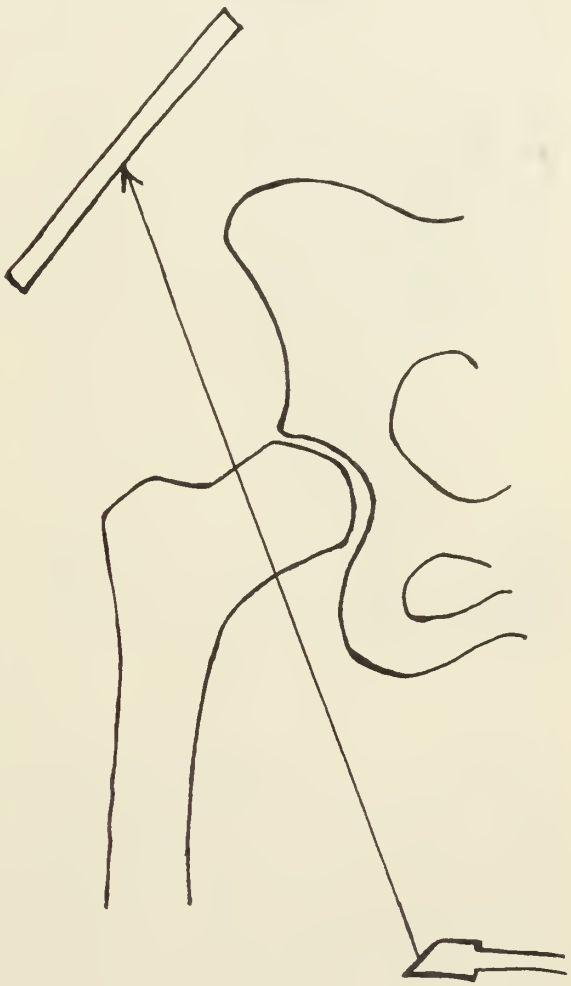


Fig. 1. Diagram to show position of tube and cassette for obtaining vertical projection of the neck of the femur.

The fact is well known to all surgeons and roentgenologists that in order to determine whether or not the fragments of a fractured bone are in accurate apposition and in good contact it is necessary to have radiographs in two projections at right angles to each other—the common anteroposterior and lateral roentgenograms. These two views are used for all fractures except those of

the pelvis and shoulder, where lateral views are supposed to be impractical and reliance is ordinarily placed on stereoscopic antero-posterior radiographs. Even with these stereoscopic films it has usually been impossible to estimate accurately the amount of vertical displacement and rotation of the fragments. As a consequence it has not been possible to determine with any accuracy the position of the fragments in fractures of the femoral neck.



Fig. 2. Vertical radiograph of normal hip.

We believe it is evident that the poor results usually obtained in these fractures have been due to the dependence placed on stereoscopic antero-posterior radiographs and the consequent failure to attain complete replacement and anatomical apposition of the bone fragments. The recent advent of the technic of George and Leonard[2] by means of which it is possible to obtain clear radiographs of the head and neck of the femur in the vertical (ordinary lateral) projection is an extremely valuable addition to roentgenographic technic and enables the surgeon to visualize the precise position of fragments in two views, the same as is routinely done in all other fractures.

These vertical radiographs are easily obtained with a little experience by directing the central ray of the x-ray tube obliquely downwards and inwards from above the iliac crest of the injured side to impinge upon a curved cassette (film holder) placed on the inner surface of the thigh. If a curved cassette is not available very satisfactory films may be obtained by reversing the positions of the tube and cassette and directing the



Fig. 3-A



Fig. 3-B

Fig. 3. A. Antero-posterior view. B. Vertical view. Intracapsular fracture of femoral neck before reduction. Usual displacement. (Slightly retouched.)

central ray upwards and outwards from the opposite side to a film placed obliquely over the iliac crest, with the sound leg raised upwards out of the way (see diagram and Figure II). We have used this method with great satisfaction and it is not difficult to obtain satisfactory radiographs in this manner, through a plaster cast, with a portable machine.

In the usual type of fracture of the femoral neck the distal fragment is found to be anterior to the head fragment and rotated outwards to a considerable degree, as may be seen in figure 3, B. In a case with the usual anterior displacement of the distal fragment the reduction should preferably be brought about in two stages, first relaxing the locking of the fragments by extension and forced adduction of the leg, and then by abduction and internal rotation of the leg attempting to replace the fragments in anatomical position. This manipulation should be repeated by the surgeon as many times as necessary until the vertical radiographs show complete correction of all displacement. (Fig. 4.)

The surgeon thus being able to check the actual position of the fragments, the sound management of fractures of the neck of the femur should consist of the following four steps:

1. Preliminary antero-posterior and vertical radiographs to determine the position of the fragments.
2. Relaxation of the locked fragments by adduction and extension followed by abduction and internal rotation to correct the displacement. This is preferably done under light anesthesia to relax the muscle spasm.
3. Immediate vertical radiographs to make certain that all displacement has been corrected. The manipulation must be repeated until the radiograph shows anatomical apposition.
4. Immobilization in plaster, preferably followed by additional radiographs in two or three days to show that the reduction has been fully maintained during the application of the plaster support.

Patients who are cared for in this manner are extremely comfortable and do not complain of any discomfort after becoming used to the plaster. In our experience this added comfort of the patient resulting from complete reduction has been a very striking feature.

[2] George, Ariel W., and Leonard, Ralph D.: Ununited Intracapsular Fractures of the Femoral Neck Roentgenographically Considered. *Am. Jr. Roentgenol. and Rad. Ther.* 31:433-441 (April, 1934).



Fig. 4. Vertical view. Same case as Fig. 3, after reduction.

SUMMARY

The generally unsatisfactory results obtained in the treatment of fractures of the femoral neck have been due largely to failure to obtain the complete reduction of the fragments which must be brought about for bone union to occur. In order that complete reduction may be achieved, it is necessary to know the displacement of the fragments in the vertical projection as well as the amount of horizontal displacement shown in the antero-posterior radiograms. Stereoscopic antero-posterior roentgenograms do not give an accurate representation of the amount of vertical displacement, and to see the actual position of the fragments it is necessary to have vertical radiographs taken by means of the simple technic of George and Leonard. Reduction is best achieved by the method of adduction and internal rotation followed by immediate radiographs in both projections to show the actual position of the fragments. This is repeated if necessary until complete reduction has been attained, followed by immobilization in plaster. This procedure results in great comfort for the patient and affords the best chance for bony union to occur.

2400 South Street.

PSYCHOTHERAPY IN THE GENERAL PRACTICE OF MEDICINE*

FRANKLIN G. EBAUGH, M. D.
DENVER, COLORADO

Psychotherapy comprises all the various mental or psychological methods of treatment of both mental and physical disorders. Psychotherapy[1] may be defined as "an effort to influence in the right direction the attitude of the patient toward himself, toward his mental and physical processes, toward his environment. It is an effort to teach him to understand himself, his illness, and the cause or causes of his illness, whether this cause or these causes lie in his body, in his environment, or in the superficial or deeper layers of his mental life." From this point of view psychotherapy includes the more or less common-sense methods as evolved by the American School of Psychiatry under the leadership of Adolf Meyer. These procedures consist of the following:

1. Establishment of rapport between the physician and the patient. This rapport, to be effective, must be based on a certain amount of respect and confidence on the part of the patient. It is best furthered by a careful investigatory program instituted by the physician at the first interview. The more completely the history, physical examination, mental examination, serological and blood tests are done the more the patient feels he can depend on the results of the examinations. The physician must be quite frank in the matter. It is quite proper to tell the patient that before any final opinion can be given it is necessary to complete the study of his case. This causes no difficulty, provided the physician has a definite investigative procedure outlined (including thorough physical and neurological examinations) and starts the patient on it at once. Any patient is willing to wait for accurate information before the physician begins treatment.

2. Aeration or ventilation of the conflict material presented by the patient may be carried out by means of Freudian catharsis (reviewing and reliving painful life experiences), by means of direct interviews, by means of discovering and probing for such material from outside sources, by suggestion, or by any other method. The important thing is that the patient be given an opportunity to discharge and bring out in the open all of those life experiences which have been causing him serious concern, either consciously or unconsciously.

3. Desensitization is the procedure wherein the patient is required to face frankly the traumatic and unpleasant experiences of his past. It is brought about, in the first place, by causing the patient to discuss at frequently repeated interviews the conflict material elicited. These interviews are repeated until the patient can review these experiences without excess emotional concern. Normal emotivity is to be expected, however, and it is not desirable or necessary to expect a complete loss of emotivity in connection with those events that should normally cause concern. It is the excess concern that is pathological and requires relief.

The term desensitization is also applied to the procedure carried out in relieving fear or other symptom manifestations in definite situations. Here the patient is required to face the situation repeatedly until he no longer manifests the symptoms in that situation, or until he is able to tolerate or ignore the symptoms if they occur. It is necessary to use suggestion and persuasion, of course, to encourage and reassure these patients repeatedly while this procedure is carried out. Through the aid of such therapy a young girl who fainted every time she saw or heard of blood was enabled to completely overcome this tendency. This procedure is especially valuable in the symptomatic treatment of fear reactions.

4. Re-education is carried out in connection with all of the above procedures. It is essentially the development of clear insight on the part of the patient into the mechanism of his illness, the establishment of new habits of response (as in desensitization) and the formulation by him of an adequate industrial, social, recreational, and activity program to insure future stabilization.

5. In addition to the above it is often advisable to desensitize the patient's family to his illness and re-educate them into new habits of response toward the patient.

6. All contributing physical factors are corrected as far as possible. Measures for their correction are instituted at the earliest possible interview and are utilized as psychotherapeutic aids.

The above procedures, to be carried out intelligently, require that every individual case be formulated in terms of its causative factors in such a way that those factors which can be modified are emphasized and become the center of attention. Factors which cannot be altered are recognized as such and the patient is trained to tolerate them. We have found such procedures to operate successfully in the large majority of our cases.

Psychotherapy is not a new concept, nor should it be accepted by the general practitioner as being difficult, mysterious, or illogical. Psychotherapy is an essential part of the general therapeutic armamentarium of each medical man and is not the exclusive domain of the specialist.

The present status of psychotherapy is of peculiar significance in relation to present-day trends of medical education and practice. It was only a few decades ago when the general medical man routinely practiced psychotherapy. The beloved

* Read before the Eleventh Councilor District Medical Association, Logansport, Indiana, October 17, 1934.

[1] Strecker, Edward A., and Ebaugh, Franklin G., *Clinical Psychiatry*. Third edition. Philadelphia: P. Blakiston's Son & Co., 1931.

general practitioner of past days always had an excellent insight into the emotional and situational problems to which each individual patient was reacting. In many instances his understanding of these social, emotional, and personal problems of his patients was superior to his skill in physical diagnosis and treatment. Many of our present-day medical ideals and traditions center around this general practitioner of the past. Unfortunately, that stage of psychotherapy was rudely interrupted by the rapid development of clinical and laboratory techniques and refinements as well as by the development of over-specialization, which naturally led to the physician's thinking more and more in terms of the parts and part functions rather than of the total individual. Patients have felt this lack of interest in their emotional and personality problems and have drifted to quackery, charlatanism and other shady sisters of therapeutics. It has been variously estimated that there is an expenditure of one hundred and fifty millions per year to these groups outside of the legitimate field of medical practice.

I am sure that at the present time we are entering into another period of medical progress in which the social and psychological aspects of all medicine will be more emphasized, both from a viewpoint of medical education and practice. A recent report on medical education emphasizes the general need for revision of medical training by (1) bringing clinical methods into closer relation with preliminary sciences and with anatomy and physiology—to this I would like to add psychobiology; (2) permeating all teaching with the idea of prevention and demonstration of its methods (this includes mental hygiene); (3) emphasis on the importance of the psychologic aspect of medicine and the treatment of the person rather than the disease; and (4) recognition of the concept of medicine as a social agency. Each of these recommendations indicate the growing need for psychotherapy.

Dr. Burnet of the Pasteur Institute of Paris gives an excellent description of the basic doctor of the future as follows:[2]

> "He should be the medical pioneer of the people; the detector of disease; the clinician of early diagnosis and treatment; the adviser as to whether a patient shall be treated at home or sent to hospital; the collaborator, on terms of reciprocity or services, with the dispensaries and health centres.
>
> "He should possess the common stock from which specialists will develop; specialists of every kind, the laboratory analyst, the radiologist, the professor of medical science and the clinical teacher, the surgeon, the psychiatrist, the hygienist and the pure research worker. He is the least specialized, the most complete and, from the viewpoint of the health of the individual and public health, the most essential, the most authoritative of all doctors. In order to distinguish him finally from the old practitioner, we might call him the 'basic doctor,' and it is he whom the faculties should train by endowing him with basic knowledge."

In the future practice of medicine this "basic doctor" will be required to focus on the clinical applications of psychotherapy to three main types of characteristic problems which will confront him in his daily practice: (a) the rank and file of mental disorders encountered in general practice, especially those of the minor psychoses or the psychoneuroses; (b) the average run of physical and toxic disorders; (c) the organic disorders. In this paper we will not discuss the important major psychoses since they may not be frequently encountered by the general physician, and quickly come under the care of the trained psychiatrist. Our discussion will be better served by emphasizing the psychoneuroses since they are the most frequent conditions contacted by the general physician.

The general physician is in an especially strategic position to deal wisely with psychoneurotic patients since he is usually the first to see the patient. Statistics vary regarding the prevalence of the psychoneuroses in general practice. A study conducted several years ago,[3] in which each professor of medicine in American medical schools was interviewed, indicates that some 30 to 40 per cent of their clinical problems were predominately psychoneurotic. In this group skilled and complete examinations by the clinician did not reveal an adequate somatic basis for the patient's symptoms. The difficulty encountered by the clinician in dealing with these problems indicates the necessity of skillfully dealing with the mental and emotional side of each patient as well as the physical.

It is useful for the general practitioner to recognize three types of psychoneuroses into which the majority of problems will fall. These are (a) hysteria, (b) anxiety states, and (c) obsessive states.

HYSTERIA

Hysteria is a condition in which symptoms are developed through suggestion at a time when the patient either temporarily or permanently is failing to adjust himself to life. It is most important for the general practitioner to realize that the phenomenon of hysteria is based on suggestion, and, in general, hysteria may be expected to develop following characteristic situations such as:

1. Individuals who have acquired a sense of inferiority either in respect to their whole body or

[2] Burnet, Etienne, "Medical Education and the Reform of Medical Studies," *Quart. Bul. of the Health Organization of the League of Nations*, Vol. II, Extract No. 11.

[3] Ebaugh, Franklin G., "The Crisis in Psychiatric Education," *Jour. of the Am. Med. Assoc.*, August 27, 1932, Vol. 99, pp. 703-707.

of one or more limbs or organs. Hence, the slightest ache or pain determines the hysterical symptoms.

2. Hysterical symptoms are sequels of commotion—actual physical trauma, blow on head, injury to eye, etc.

3. Hysterical symptoms may be produced under the stress of great emotion. In such cases the natural outlet of the emotion is blocked and the intensity of the affect increases, and with this the extent of the physical expressions of emotion; hence, symptoms of rigidity, tremor, collapse of the legs, excessive purposeless movements as hysterical tics or fits, etc.

4. Hysterical symptoms are produced by hetero-suggestion. These are generally the result of some unwise remark or action on the part of the physician or nurse which conveys to the patient the suggestion that he has some physical deformity.

5. Hysterical symptoms acquired by imitation from another individual—stammering, abnormal movements, various gaits, etc.—which are regarded as very wonderful and very extraordinary by the patient.

6. Hysterical symptoms which are habit continuations of definite but temporary organic difficulties. This may range from blindness and deafness, paralyses, contractures; may be induced by low vitality owing to illness or an operation and other deformity acquired by the patient in adjusting himself to life. In examining any case with any physical disability whatever, hysteria should also be kept in mind. It is a truism to say that every disease has its functional elements, and this is often much larger than is at first expected.

Since hysteria is a phenomenon of suggestibility, the general practitioner should recognize that there are important influences which increase the suggestibility of the average individual. These influences are fatigue, mental conflicts, disturbing emotional experiences, and the general attitude and opinions of those we contact.

Hysteria is, therefore, the great mimic of somatic disease, particularly simulating any number of neurological disturbances. To understand the motivation of the symptom we must scrutinize the forces leading to its production by a thorough genetic-dynamic study, i.e., a chronological study of important life facts dating from birth. With early recognition a hysterical phenomenon may be checked at its beginning by common-sense treatment or it may be encouraged in its fixation by undue emphasis on physical disease.

Though this is not the place for a didactic discussion of hysteria, it would be well to point out the more common phenomena in which it finds expression. Among them are:

1. Mental phenomena—hysterical convulsions closely simulating grand mal attacks, amnesic states, fugues and the like.

2. Sensory changes on an hysterical basis as:
   a. Anaesthesia to touch, pain, temperature and proprioception.
   b. Hyperesthesias.
   c. Paresthesias.
   d. Disturbances of all special senses—blindness, deafness, etc.

3. Another group present motor involvement as:
   a. Hysterical paralyses—monoplegias, paraplegias, hemiplegias.
   b. Contractures—torticollis.
   c. Abnormal movements—astasia, abasia, chorea, tremors, incoordinations, etc.
   d. Loss of voice.
   e. Benign respiratory tics as sneezing, hiccoughing, dyspneas, etc.
   f. Spasms—esophageal, globus, vomiting, vaginismus, blepharospasm, etc.

I have prepared a series of case histories in which the phenomena of hysteria is illustrated by our films. You will see in these pictures the protean nature of the motor, sensory, and mental phenomena encountered. Likewise, I hope you will note the prompt responses to psychotherapy as outlined previously.

Our first patient illustrates hysterical paraplegia, in which the results of successful psychotherapy following hospitalization are shown:

F. M., an 18-year-old Mexican girl, entered the hospital with complete inability to walk, which trouble has existed for three years. The patient following her mother's death was left the responsibility of rearing three younger sisters. During a diphtheria epidemic two of these youngsters developed the disease and the patient had the unpleasant experience of seeing one of them strangle to death from untreated laryngeal diphtheria. She reacted almost immediately with the pseudo-paraplegia, but continued to direct her activities of maintaining the household from a wheel chair.

On admission, we found some wasting of lower extremities, stocking type of anesthesia of both without changes in or presence of pathological reflexes. Interestingly enough, the patient selected as a pattern to imitate the condition she suffered earlier in childhood when she had a bilateral joint infection of the knees with temporary inability to walk. Because of a marked degree of mental retardation, extensive analysis of this situation could not be undertaken, but with patient re-education and a thorough understanding of what was being attempted on the part of all who worked with the patient, we gradually minimized her fear of doctors, bringing progressively to an end her dramatic unsteadiness and restoring both sensory and motor functions of the involved part.

Our second patient illustrates hysterical aphonia and general motility disturbances developing over several years in a life setting of financial difficulty and many frustrations and identification with other members of the family:

M. K., a 41-year-old, white female, with complaints of being a chronic invalid for five years, inability to talk above a whisper for four years, and unwillingness to walk unassisted for three years. These complaints were thoroughly investigated with known laboratory procedures and consultation examinations in which no laryngological reason could be found for the possible aphonia, nor plausible basis for the inability to walk. The background was that of a chronically, life-long complaining individual who developed somatic complaints in the setting of financial difficulty for which she was operated injudiciously both for abdominal adhesions and tonsillectomy.

It was following this that she settled into the state of partial aphonia and disturbances of motility. After the investigative procedures, the patient was reassured of the absence of any somatic basis for her difficulties. A thorough life study was made and a search undertaken for pertinent life experiences. Psychotherapeutic studies led to uncovering certain identification mechanisms, particularly noteworthy of which was that her father, a miller, by virtue of his occupation and inhalation of flour dust, developed a partial aphonia—and thwarted life ambitions, chiefly disappointed love affair from which patient failed to realize a desired marriage and domestic life. With an understanding, forceful re-education, and well controlled, increasing activity program, the patient left the hospital walking and talking as normally as any individual, with excellent insight into the emotional origins of her symptoms.

Our third patient illustrates hysterical hyperkinetic phenomenon following an acute emotional disturbance:

E. L., 36-year-old, white female, admitted to the hospital with marked uncontrollable and violent trembling of all extremities coming about as a reaction to having struck and killed a youngster with an automobile. Thorough physical, neurological, and laboratory examinations revealed no somatic basis for these movements, and it was formulated that they developed on the intense emotional basis centering about the accident. The tremors were increased when a charge of manslaughter was placed against her. During the course of hospitalization, at the time when exhaustive interviews were being held with the patient, in an effort for complete aeration of her feelings, the movements were exaggerated. With the promise of the state's attorney to drop the manslaughter charge, the condition progressively improved, and, at the time of discharge, she was doing occupational work, had no tremor, no distress, and a fair comprehension of the entire situation with reference to making an adjustment at home.

The fourth patient illustrates hysterical phenomenon consisting of characteristic mental and motility phenomena developing in an unstable individual during a turbulent coal strike:

C. G., 45-year-old, white female, admitted to clinic complaining of lapses of memory, difficulty in walking and in controlling movements. These complaints developed in a setting of marital discord, four miscarriages, and infidelity with feelings of guilt and resulting in periods of "blankness" and vague somatic complaints. This situation was further complicated by a coal strike marked with bloodshed in which the family and patient were involved. Motility disturbance as a pattern of response was determined by chorea in adolescence with similar dissociated movements. Examination revealed marked incoordination of muscular movements. All other investigative procedures were negative. This patient was hospitalized, desensitized regarding her physical status and fears, shown how now in situations of extreme emotional stress she was responding with movements similar to and patterned by her early chorea. With a complete formulation of her illness on the basis of the life situation, and an augmented activity regime and occupational therapy, rehabilitation occurred. The patient left the clinic recovered.

The fifth case illustrates convulsive seizures with opisthotonus in an adolescent girl in reaction to a series of mental conflicts centering around general situational trauma:

D. S., 15-year-old, white female, admitted to the hospital with a history of convulsive seizures in which opisthotonus was the outstanding feature. Subjective complaints of the patient were all referable to the pelvis but intensive consultation and investigative procedures revealed no pathology. Similarly, neurological findings were lacking. The illness developed in an extremely crowded home situation from which the patient sought escape in the company of a boy her own age with whom she had relations. Sexual mis-information and intrafamilial discord over the boy involved produced fears and a marked disgust reaction for the sexual activity, symbolically projected in the seizures and opisthotonus, and to some extent determined by a knowledge of grand mal attacks which the patient observed in a former employer. Similar attacks occurred in the hospital but decreased in frequency as psychotherapeutic interviews pointed out the relationship of and chronological development of the pertinent factors involved. She was pushed into activity, numerous interests were accorded in terms of occupational, group, and social therapy with the result of prompt recovery and discharge from the hospital.

Our sixth case illustrates convulsive phenomenon developing in a war veteran:

P. D. Q., 35-year-old, white male, was admitted to the clinic with the complaint of generalized convulsive seizures. Attacks referred to in the complaint were frequently observed and seemed to be bizarre, unusual, atypical sort of seizures beginning first in one extremity and progressing eventually to implicate all. Neurological consultations, encephalograms, repeated head x-rays and studies ruled out beyond a doubt an organic basis, for the most interesting clinical picture. Throughout a period of study it was found that the seizures could be produced and controlled by means of hypnosis, a procedure which, you all know, employs the principle of suggestion. It was further learned that the difficulty arose in a setting of tremendous emotional shock during the darkest days of the war when the patient had the harrowing experience of seeing his buddy blown to bits as he stood beside him in a shell hole. In spite of every effort of suggestion and careful analysis of these correlated factors, the patient did not improve, was transferred to a Veterans' Bureau hospital, and, as occasionally happens in such instances, committed suicide.

The seventh case illustrates a blepharospasm developing on the basis of a conflict pattern and a fear of operation and blindness:

F. P., 57-year-old, white male, admitted to the hospital with inability to open his eyes and pains in the back of his neck. A photophobia preceded the blepharospasm and was of five years' duration. The initial difficulty arose in a situation of marked economic stress with temptation to steal money from the bank where he was a janitor, complicated by excessively long working hours and climaxed with a fear of an operation which he was told he would have to have upon his eyes, or blindness might develop. The temptation to steal was considered the most important psychogenic factor with blepharospasm unconsciously symbolizing closing his eyes to temptation. By means of our association motor apparatus, critical words were learned and used as a basis for free association. In doing this, critical situations were brought to the surface and paved the way for discussion. Failures were recognized and the patient reassured about these. With this aeration and desensitization, a definite improvement was seen over a period of time and he left the hospital greatly improved.

ANXIETY STATES

One of the most interesting and common of the psychoneuroses is that seen in attacks of dyspnea, palpitation, sweating, vertigo, precordial discomfort and often gastro-intestinal manifestations with the predominating emotional accompaniment of apprehension, a vague fear of impending danger or disaster. Earlier writers attributed these anxiety states to frustrated sex excitement or unfulfilled erotic activities. However, with the growing appreciation of a genetic-dynamic study of a problem, we have come to see the anxiety attack resulting not from misdirected sexual activity alone, but from any number of everyday stresses and strains.

These were the cases so frequently misdiagnosed as hyperthyroidism; these were the cases we called

"post flu hearts" in 1918 and 1919 because of the seeming cardiac pathology. An outstanding psychiatric dispensary in this country registered only eighty cases of anxiety states in the year 1926, when this country was without economic stress, but in the year 1932, when we began to feel the pressure of depression, 232 such cases were listed.[4]

As anxiety states one may encounter:

1. General irritability—a response to overexcitation, usually with marked tension, pathological alertness and hyperactivity of auditory sense particularly.

2. Anxiety attacks or panics in which the outstanding feature is fear—fear of death, fear of stroke, fear of insanity—together with which there is a disturbance of one of the levels of physiological functioning as:

a. Cardiac—with palpitation, precordial distress, tightness, fainting, smothering, sinking spells, pain around the heart and substernal pressure; or

b. Respiratory—dyspnea, shortness of breath, pain in the chest, tightness in the throat; and

c. Gastro - intestinal — diarrhoea, constipation, nausea, vomiting, belching, with the possibility of others as frequency in micturition, vertigo, giddiness, tremor and trembling, night terrors and paraesthesias. Of such common occurrence are these, and so strikingly like organic conditions that they have frequently been diagnosed "angina pectoris, pseudo angina, heart murmur, soldier's heart, effort syndrome, spastic colon, appendicitis, cecal stasis, gastropathy and gastric ulcer."

An illustrative, typical case of an anxiety state will be of value in this discussion:

K. G., 23-year-old Catholic girl, seen in our out patient department because of intense anxiety centering about fear of death, fear of going places alone, or staying by herself. She complained of her heart pounding and was afraid it would burst. She was afraid her anxiety would lead to insanity. Complaints developed in a setting of marital and sexual incompatibility which resulted in separation from her husband to whom she had turned at the age of 19 in a hope of emancipation from her overprotecting, asocial, old-world, Italian parents with their different standards of living and attitudes of life, which she was unable to accept. With the separation from her husband, feelings of guilt arose when she instituted proceedings for a divorce and she felt she was violating a most rigid tenant of her faith. Fears and anxiety then occurred. The early developmental history revealed an unstable child with numerous fears.

Routine examinations were negative in their entirety. Electrocardiogram, chest plates showed no pathology. In the treatment, our first step was to explain the patient's true physical condition, utilizing our reports as aids in reassuring her. We then proceeded to a personality study in which we could point out the developments of her feelings in terms of the life situations. Church law was explained with the aid of a priest who helped in handling this aspect. Recreational and social outlets were outlined by social service worker. The patient is making a satisfactory adjustment and continuing weekly visits to the out patient clinic.

[4] Richards, Esther Loring, *Practical Features in the Study and Treatment of Anxiety States*, read before the Med. and Chir. Assoc., Baltimore, April 26, 1933.

OBSESSIONAL STATES

This third and last group, though interesting, is less frequently encountered, and because of the involved psychopathological factors of this group, treatment of these patients usually should not be undertaken by the general practitioner.

It is diagnostic of an obsession that the patient knows its unreality and feels it is derived from something apart from himself. He is conscious of the absurdity involved in his thinking and may attempt to resist its recurrence. We are all familiar with the doubt of having turned off the gas heater after retiring, of having put the right letters in the right envelopes after posting them. This individual will say to himself, "I *know* I've done it, but I *feel* that I haven't."

The disorders of obsessive character are doubts, fear states, thoughts and acts. They can be analyzed and explanation may be found in the influence of past life experiences as can be seen from the following case history:

I. W., 58-year-old, white female, entered the hospital complaining of excessive hand washing, fear of saying things that might be incorrect and a fear of germs and dirt. These fears originated in a setting of frequent trips to physicians for gastric and abdominal complaints with expression of body protests and feelings of guilt arising out of fear of pregnancy, exceedingly poor marital adjustment into which she forced herself as a compensatory mechanism for life-long homosexual practices and drives. Preoccupation over these facts in view of her Catholicism led to frequent and prolonged confessions to prepare herself for death. The background contributes an important constitutional element of an over-sensitive, precise, meticulous, exceedingly conscientious individual with tendency in her childhood to obsessive thinking and acting. Physically, there was nothing remarkable and laboratory findings were negative. A gastro-intestinal series alleviated the fears centering about the gastro-intestinal tract. Through prolonged interviews over a period of six weeks, conflict material produced itself very readily and the patient with her good intellectual endowment saw the relationship and tie-up of these facts as they pertained to her illness. The areation was free and without hesitation. Re-education undertaken by nurses brought the patient to a point where she was completely relieved of the misophobia. She returned to her home with insight and understanding to be followed in our out-patient department.

PHYSICAL AND TOXIC DISORDERS

Each case contacted by the physician will require a careful psychotherapeutic management. The attitude and the approach of the physician toward each patient, satisfying explanations regarding diagnosis, course and expected outcome of the disease treated, convalescence, are all outstanding examples of ordinary psychotherapeutic requirements.

The problems of convalescence are of particular importance since an unwise management here may result in the development of invalidism or varying degrees of psychoneurotic disturbances. Some patients are anxious to run before they can really walk comfortably; others will never wish to leave their beds; whereas, others will carefully follow the advice of the physician. Wise management during convalescence, especially in post-operative

stages, will be most important in the prevention of unnecessary hypochondriasis and somatic preoccupations which often handicap patients for the rest of their life span.

ORGANIC DISORDERS

In dealing with organic disorders there are likewise numerous opportunities for psychotherapy. Practically every case of an organic disorder has concomitant mental elements. The importance of the safeguarding therapy in cases of cardio-vascular disease is important. These handicapped patients should be safeguarded regarding matters of rest, diet, physical and mental overexertion and the like. A more optimistic picture can be given to patients with cardio-vascular disorders in general, provided they accept the safeguarding type of therapy indicated. In the main, the patients with these handicaps can get along just as well as their more fortunate brothers if they can avoid undue physical and mental stress and strain.

Likewise, it is of great importance in dealing with the late residuals of syphilis to explain to the patient the nature of the infection he has and the importance of receiving continuous treatment. We should realize in dealing with the emotional side of our patients' problems that the development of symptoms on their part follows a logical beginning and is just as definite and real as the development of an acute infection or a broken leg. The patient wishes to be understood and will always cooperate when thorough clinical investigations have been made from both the somatic and mental viewpoints.

In prescribing effectively for each individual patient we should include therapeutic elements that act as a specific for the mental and emotional side, as well as the physical. Each patient presents both mental and physical aspects, each dependent on the other and influencing each other very extensively, and a wise therapist will always consider both when outlining his treatment.

ESSENTIALS OF MEDICAL PROGRESS*

OLIVER J. FAY, M. D.
DES MOINES, IOWA

We of the medical profession have been wont to look back upon the past seventy-five years as a period of unparalleled development in scientific medicine, and to feel a particular pride in the progress made during the past two or three decades. Granted that our judgment of the value of the countless contributions that have been made to science and to human welfare may be warped by the lack of perspective that only time can give, I still believe that ours is a justifiable pride. And this pride we may well extend to the closely parallel development of medical organization. We may trace schools of medicine—using the word school in its broader sense of a group of men who hold to a common belief—back through the centuries, but medical societies as we know them are a relatively recent development in this country. At about the time when medical advance received a new impetus through the development of the science of clinical pathology, physicians began to organize groups which held occasional meetings for the interchange of scientific knowledge. The rapid evolution of such organizations into interstate, national, and international groups did not gain its sole impetus from medical progress. Stimulating though this advance was, we shall have to concede that the development of transportation facilities also played a major role. It has made possible meetings such as this one, meetings where not the science but the art and the ways and means of medical practice are brought under discussion, and to me these meetings have come to seem of vital importance to professional progress. It is essential that medical knowledge should find the widest possible diffusion among the members of the medical profession, not only in our cities and great medical centers, but also among those members who carry on their work in greater or less isolation, without the aid of hospital equipment and well-staffed laboratory. Our medical societies with the clinics and study courses which they sponsor are invaluable in raising and maintaining a higher standard, a wider knowledge, a keener interest in medical progress. Yet meetings such as this, meetings which bring together those actively interested in the organization work of the profession, have an essential place in medical life, have a vital function to perform. They help to maintain the newly awakened spirit of solidarity; they strive to assure the profession the economic independence which makes continued study a possibility. They must now evidence a unified spirit in defense of the freedom of their profession to prevent the degradation of that profession to the level of a politically controlled trade union.

I assume that the tribal medicine man whose stock in trade was made up of chicanery, superstition, and personal magnetism, took a purely materialistic attitude towards his calling, and that his ministrations were only for those who could bring him the required tribute. It is rather definitely established that the first rift between temple votary and temple physician was due to differences over the division of the sacrificial meats. But the physician's custom of serving his suffering fellow man regardless of the latter's ability to pay for such service is so time-hallowed that it has come to be taken for granted that the medical profession is at the service of the people under whatever terms and conditions the sociologist, pro-

* Presented before annual Secretaries' Conference, Indianapolis, January 27, 1935.

fessional or dilettante, and the politician may choose to impose. The habit of service has, moreover, become so ingrained in the profession, that it is quite possible that we might accept such conditions, however great the personal sacrifice demanded, however galling the curtailment of our liberty, if it were not that it is impossible for us to believe that not the medical profession alone, but the people as a whole would suffer under any system of bureaucratic control of the practice of medicine. It is not that we are opposed to any change; it is inevitable and right that changes in the practice of medicine must come, must be made, to meet the changing conditions of life, but those changes should be *evolutionary*, not *revolutionary*. They should be worked out by the profession to meet needs as they arise, they should be varied to conform to the varied conditions in communities presenting widely different economic and social problems, and above all the men who are devoting their lives to the care of the sick, who are constantly brushing shoulders with life and with death, should be allowed to bring their wisdom to the solution of the problems. It should not be demanded of them that they accept, that they rubber-stamp, a synthetic, desk-born, inelastic scheme of politically controlled health insurance, that would degrade their free profession to the level of a trade union.

It is easy to bring charges and counter-charges, and to wax eloquent in their support. To avoid any personal bias let us turn to a consideration of established facts. Some years ago, a self-appointed Committee on the Costs of Medical Care made an extensive survey of the medical situation in this country, and published its conclusions in a series of booklets and in a final report, to which certain members of that committee took grave exception. This minority disagreed not only with the conclusions of the majority—a group from which men engaged in the actual practice of medicine were conspicuously absent—but also with the material upon which these conclusions were based, charging that the conclusions had been based not upon unbiased material which might have been available, but rather that the material had been selected to support preconceived theories. Be that as it may, these conclusions were that while doctors were underpaid and often overworked, the average man received insufficient medical care and such care as he did receive cost him too much. As a panacea for these evils, a system of health insurance was proposed, a system which, while ostensibly protecting the personal relations between physician and patient, in reality would take the control of medical practice out of the hands of the medical profession.

The idea of health insurance was not "made in America." Germany has had more than half a century of experience with compulsory health insurance, a period of time which should be sufficient to show the beneficent effects of this method of medical care. The health insurance of that country is not state medicine; instead the administration of the insurance is vested in the Krankenkasse, an enormous organization with thousands of lay employees, over which the state exercises only nominal control. The cost of this insurance has increased from 3% to 6½% of the workers' wage, a cost distributed between employers and employees, but there is now in addition a large annual deficit. A deficit of a couple of hundred million, stated in dollars, or even of a few hundred million more may, however, seem trivial enough during this period of generous figures, and since the health of the nation is a major asset, the mere cost may be of minor consideration if it has purchased better health and a longer life of usefulness for the beneficiaries—if beneficiaries they be—of this system of health administration. A comparison of the morbidity in our own country and that in Germany is so startling that the advocates of compulsory health insurance have insisted that such a comparison is impossible because of the adverse economic conditions which have prevailed there during the post-war period. Going back, then, to Hoffman's statistics of prewar Germany, we find that "the number of days of sickness per insured member, which was 5.9 in 1885 when the law had just gone into effect, increased to 6.10 in 1890, and 9.19 in 1913."

We have no accurate statistics for the United States as a whole but Hoffman states that in Boston the average sickness loss for males is only 6.5 days per annum, for Rochester, New York, 7 days, for the state of California 6 days, as compared to a time loss of 9.2 days for insured Germany, and 9.5 days for insured Austria. Simons and Sinai state that the number of days lost in Germany on account of sickness has increased more than two and one-half times from 1888 to 1929. A comparison of the mortality rate in countries with compulsory health insurance and those without the questionable blessing of such insurance is equally disconcerting for its proponents. Again taking prewar figures, to avoid any controversy on the effect of post-war conditions, we find that: in 1912 the death rate in Germany was 15.6 per thousand population, in Austria 20.5, and in Hungary 23, all countries enjoying the benefits of compulsory health insurance, while in several countries with no compulsory health insurance laws, the death rate in the same year was 11.2 in Australia, 8.9 in New Zealand, 14.2 in Sweden, 14.1 in Switzerland, 14.8 in Belgium, 13 in Denmark, 12.3 in Holland, and 13.9 in the United States.

Personally, I do not consider these figures absolute evidence against health insurance though their general agreement is significant. It is only when we take other known factors into consideration that they become damning evidence. The rates charged are necessarily low—the economic factor is

the chief advantage from the workman's standpoint; the administration costs are necessarily high. At most, 60% of the income from insurance can be allocated for medical fees. The malingerer is not the rule in the working world, he is probably the great exception, but like the greatly outnumbered Roman sodiers who passed and repassed a given point, he gives the impression and makes the inroads on time that a vast army of sick would command. The army of neurotics, those who while free from any organic disease which our modern methods of diagnosis can detect, yet feel themselves ill and demand constant attention and reassurance, take up a far greater portion of the physician's time, particularly when time is free for the asking, and illness or presumed illness is even linked with possible financial benefits. Is it strange, then, that the Krankenkasse physician whose unbuttered bread depends upon the number of patients whom he may attend, can give little time to any one patient, too often overlooks organic lesions until it is too late? Is there not good reason for an increased morbidity, subsidized as it is by sick benefits, and an increased mortality rate under a system where diagnosis is a matter of minutes and not of painstaking study? We Americans pride ourselves on our good business sense. We are wont to remark that, "In this world you get what you pay for," yet where matters of health are concerned we are childishly, unbelievably credulous. We not only expend vast sums for patent medicines—sums which would go far towards relieving the supposed hardship imposed by the cost of medical service, but we are willing to believe that in this one vital field, our Yankee rule of value for value does not apply, and that by some legislative hocus-pocus, we shall receive much for little.

In England, too, they have had long experience, almost a quarter of a century, with a form of compulsory health insurance. The enthused proponents of this type of insurance would have us believe that the panel system of medical practice has proved its value, and has become increasingly popular with the medical profession as well as with the working man. Two recent news items are, however, illuminating. On December 31, 1934, *Time* recorded that the Medical Practitioners Union, an organization of municipal health officers that was formed in 1916 to protect the civil service rights of its members, had taken the final step, its members abandoning their professional standing for that of civil servants, by joining the British Trades Union Congress. It is true that their secretary threw a sop to their professional pride by avowing that "We are bound by our own rules never to strike where the sick are concerned," but in charity and sorrow, we can only assume that intolerable conditions, direst necessity, must have forced their decision to sell their professional birthright for so questionable a mess of pottage—a birthright of professional standards and standing for a mess of pottage called trade unionism which did not include the right to strike though striking is the one effective weapon of such organizations, and refusal of their organization to comply with a general strike order might endanger its very membership in the Trades Union Congress, a membership so dearly bought.

In the January 19, 1935, issue of the *Journal of the A. M. A.*, its London correspondent records a scarcely less significant and disturbing condition. It reports that in the North of England, physicians have been buying panel practices by mortgaging them to the money lenders who financed the procedure. The financial corporations buy such panel practices outright, thus becoming the preferred purchasers, and as a result of the onerous conditions which the money lender imposes on the purchaser, the latter often finds it impossible to meet his obligation and becomes in reality a mere salaried servant of the corporation who purchased the practice. The Insurance Acts Committee of the British Medical Association is attempting to make some arrangements with a medical insurance agency which would make possible the purchase of such panel practices under less onerous conditions, and with less danger of commercialization of the practice. I believe that our American insurance companies are as fair and generous as those of any country, but I ask myself, I ask you, on the basis of your own experience with insurance fee schedules, whether you honestly believe that the conditions of medical practice, not alone from the standpoint of the physician, but even more from the standpoint of the patients, would not suffer under such insurance sponsorship?

It has frequently been charged against the medical profession that it is always *obstructive*, never *constructive* in its attitude towards change, that it has made no attempt to meet changed conditions on its own part but has merely sought to impede all progress. It is true that we have not welcomed the sweeping suggestions of the sociologists with unquestioning enthusiasm; it is true that we have not thrown our hats in the air when national bureaucratic control of our profession has been urged upon us; it is true that we have not accepted Utopian dreams with the childlike credulity of their chair-warming authors. Perhaps it is not our fault that having spent years in the service of science which demands that mere assumptions shall not be considered facts, we cannot accept as truths statements based upon such assumptions. But we in Iowa have made honest attempts to meet the changing needs with changing policies, and I have reason to believe that the profession of many other states has evidenced a like willingness to do its part. Perhaps we have heard little of their suggestions and experiments because theirs,

like our own, have met with little encouragement and co-operation. Thus some years ago, one of our county societies arranged to take over the medical care of the needy on a contract basis, the agreed sum to be paid into the treasury of the society, the society to make itself responsible for adequate care, its members to give their services in rotation. Other counties have followed suit, often on a fixed fee basis, established on a percentage of that usually charged in private practice. As the number of needy increased, however, some of the county boards of supervisors were incensed because the total cost of medical care also increased; such an increase was an injustice to the taxpayer, the taxpayer who at the same time was required to purchase provisions for the needy not at a discount but at the usual market price. The supervisors felt that they could provide medical service at lesser cost by employing a contract physician, unless the physicians endorsed by the county society were willing again to cut their fees in two.

Faced with the necessity of providing medical service to communities in which a large percentage of the sick were unemployed or whose income had been so reduced that the medical attendant must perforce wait indefinitely to collect his fee, many of our physicians hoped that CWA projects would bring some small measure of relief. In our own county, where cordial relations with the relief administration have for the most part prevailed, an especial effort was made to see that minimal charges were made for services rendered in recognition of the emergency nature of the relief administration. Eventually, at least some of the checks for these services filtered through with the sums arbitrarily still further reduced so that the physician in the end received perhaps 25% of the prevailing fee schedule. When a shelter home for transients was established as a federal relief measure, a committee appointed by the county society arranged to have the medical service rendered for a reasonable fee, and that such service be distributed in rotation, preference being, however, given to those physicians whose lack of an established practice made it particularly difficult for them to face conditions imposed by the depression. Under this arrangement the maximum cost of medical care never exceeded 65% of the weekly cash allowance for cigarettes and whatnot made these transients by the government. Yet a lay representative of the relief administration arrived one day with the announcement that the cost for medical care was excessive, and, over the protests of the committee, none of whom had personally profited by the arrangements, appointed a full time surgeon and an assistant to take over the medical work of the shelter.

Very recently in Linn County, a county with a fairly large urban population, there was again a charge that the cost of medical care for the indigent on a fee basis was excessive. Representatives of the County Medical Society then worked out a health insurance plan under which the county society would make itself responsible for adequate medical care for those on relief at a cost of $1.15 per month for each family on the relief role. That charge is so obviously a concession to the prevailing financial stringency that it seems incredible that the federal county relief agent refused to endorse the plan but demanded instead, with the autocratic power that control of federal funds lends, that services continue to be rendered on a fee basis but that the fee schedule be still further reduced. It has finally been conceded that the unit charge shall be given a one month's trial to determine its comparative cost. These are but incidents that might be indefinitely multiplied, but I think that they suffice to show why we as a profession, or perhaps I should say why we who are actively engaged in the practice of medicine, feel that state medicine is a menace not only to the medical profession but to the health of the nation, since it must needs suffer from the degradation of the profession.

It is not difficult to understand why our politicians are in favor of state medicine, call it public health insurance if you will. From the experience of other nations we know that the army of lay workers under such a plan actually exceeds the number of physicians employed, and federal employees constitute an important cog in any effective political machine. Nor is it difficult to understand the interest and the activity of the professional sociologist—he finds in such activity not only the indulgence of his pet hobby, but also opportunity, for who could be better qualified to head the many bureaus needed, to pull the strings and to direct the activities of the medical men in the field?

It is not so easy to understand the persistent work of various philanthropic foundations in furthering the interests of socialized medicine. In the past, philanthropic donations and bequests have played an important part in furthering scientific advance, have made possible experiments and advances in many fields, have enabled men who had the ability and the will but who lacked an independent income to carry on research work of permanent value to mankind.

We can only suppose that some philanthropists with an unquenchable thirst for experimentation would, like Frankenstein, create a monster which, once given life, they would find themselves unable to control. Blinded now by their enthusiasm for creation, they will not realize that if this monster of theirs should materialize it will eventually tear down what they have wrought with humane intent, will defeat their own philanthropic ends by destroying the high standards of the profession. It is not alone that high professional standards cannot long survive the blight of bureau-

cratic control and political chicanery; it is inevitable that a shackled profession can have small attraction for the highest type of manhood, and that the ranks of the medical profession would eventually be filled, not by scientists and humanitarians, but by the mill run of politicians.

ALLERGY IN ITS RELATION TO OTOLARYNGOLOGY*

KENNETH L. CRAFT, M. D.
INDIANAPOLIS

All of you whose practices lie within the field of otolaryngology are confronted daily with stubborn cases of asthma, chronic and subacute rhinitis, migraine, angioneurotic edema (or giant urticaria) of the lips or tongue, eczema of the external ear, or other kindred conditions. The etiology, allergically, of these various conditions depends upon the sensitization of the tissues of the individual patient to certain foreign proteins, or to their split components, which are toxic only to the sensitized individual.

Examination of the allergic patient often reveals marked local pathology in the nose, throat, teeth, or sinuses, and eradication of such pathology frequently results in great relief and even permanent cure of the condition. On the other hand, however, many patients show no local lesions other than the objective symptoms caused by the reaction, which in these cases seems to be due entirely to a sensitization to one or more foreign proteins. These foreign substances, or allergens, may be classified as intrinsic or extrinsic causes of allergic reactions, and may be further subdivided as to origin and nature. The allergens falling into the intrinsic class are the products of bacteria, whose normal habitat is in the tissues of the allergic individual, and whose products are toxic to him in direct proportion to the degree of his sensitization. The intrinsic class is by far the larger and more varied. Here are grouped the allergens of foods, plant pollens, dusts, drugs, and animal products, to which substances the sensitized individual is exposed by ingestion, inhalation, or direct contact.

Painstaking measures of examination frequently will result in the discovery of a definite, underlying, allergic cause for the condition complained of. Relief often may be obtained by removal of the cause as in the case of a patient whom the writer was called to see some time ago. A twelve-year-old girl was seized with a violent attack of rhinitis soon after eating her evening meal. Examination revealed all the symptoms of a very acute attack of hay fever. The patient was sneezing, her conjunctiva were congested and her eyes watering, she complained of itching of the palate, she had a profuse, watery discharge from the nose, and the nasal membranes were pale, swollen, boggy, and edematous. Prompt relief was afforded by local treatment and the internal administration of three-quarters of a grain of ephedrin. The evening meal had been a very simple one and the menu, with the exception of the dessert, consisted of foodstuffs included in the patient's daily diet. The dessert was cake, iced with a thick, rich, chocolate frosting of which the child had partaken freely. In discussing the matter with the parents, they recalled that upon two or three prior occasions the child had suffered like attacks, though less severe, after eating chocolate bars. A diagnostic test was not performed, but since that time chocolate has been under the ban and the patient has remained free from similar attacks.

Relief may also be obtained by desensitizing the patient to the offending allergen if it be such that the victim cannot avoid exposure to it in his daily environment. A case, example, is that of a woman of thirty-five years, who sought relief from severe perennial hay fever and asthma. Her attacks were as severe during mid-winter as in any of the vegetative seasons. The history of the case eliminated many of the common factors in the etiology of such a condition and pointed to a sensitization to house dust as the probable cause. This diagnosis was verified by a very sensitive skin test to a solution of dust prepared from carpet sweepings. A sterile suspension of the dust was prepared and the patient desensitized, with the result that she remained free of symptoms for three years. At that time she complained of a recurrence and the treatment was repeated. She has had no further trouble up to the present time.

VASOMOTOR RHINITIS

Probably the most common allergic manifestation with which the rhinologist comes in contact is vasomotor rhinitis. It makes its appearance irrespective of season, thus differing from the closely related, true hay fever, or pollenosis. In fact, vasomotor rhinitis simulates so closely an attack of true seasonal hay fever that frequently it is referred to as perennial hay fever. A pale, edematous, water-logged appearance of the nasal mucous membrane, together with the persistence of such subjective symptoms as nasal obstruction, paroxysms of sneezing, excessive, irritating, watery discharge, or rhinorrhea, dry throat, dull frontal headache, and an absence of the symptoms of infection and true, inflammatory reaction readily justify a diagnosis of vasomotor rhinitis. The cause and the cure are not so easily found. Very often an extrinsic cause, such as hypersensitiveness to orris powder, house dusts, molds, occupational dusts, animal danders, drugs, ingested foods, etc., may be discovered, the patient removed from contact with the offending substance or desensitized to it and relief obtained

* Presented before the Section of Ophthalmology and Otolaryngology at the annual session of the Indiana State Medical Association, Indianapolis, October 10, 1934.

as in the two cases mentioned above. A great many (perhaps fifty per cent) of these patients, however, showing all the symptoms of a typical case of vasomotor rhinitis, give entirely negative reactions to exhaustive skin tests done in seeking to establish an allergic basis for the pathology, although this, of course, does not necessarily rule out allergy in the study of the etiology of this distressing condition. It is true, also, that there are on record many cases in which no allergic cause can be found and which have received complete and permanent relief following such simple procedures, when indicated, as turbinotomy, removal of polyps, submucous resection, sinus irrigations, extraction of teeth, and even by mere cauterization of a turbinate bone. This would seem to indicate that vasomotor rhinitis is not always allergic in its etiology.

Some time ago a young woman consulted me, complaining of nasal symptoms which had been present for eight months, or since an attack of influenza, which evidently was complicated by an acute sinus infection. Since that time, although fully recovered from the infectious processes, the patient had suffered in the day time from a continual, watery, nasal discharge, which was very irritating and which was accompanied by frequent paroxysms of sneezing. At night her sleep was greatly disturbed by almost complete blocking of the nasal air passages and by a constant, dry, irritating, unproductive cough. Examination revealed no apparent pathology in the sinuses. The nasal mucous membranes were quite pale and anemic and extremely sensitive, though fairly well contracted at the time of examination. Skin tests to numerous allergens had been made by another physician but the reactions were all negative. A smear from the nasal mucosa was negative for eosinophilia. No cause of allergic origin being apparent, specific treatment from this standpoint was out of the question and local treatment tending to desensitize the exposed areas of mucous membrane with trichloracetic acid was decided upon. This was extremely difficult to accomplish even after cocainization, owing to the exquisitely sensitive condition of the mucosa. Improvement was noted, however, after the first treatment and within three weeks the patient's symptoms including cough, nasal obstruction, discharge, and sneezing had disappeared and she has remained free from trouble to the present time. Cases similar to the above in which allergic reactions cannot be demonstrated, often, however, have a definite familial, allergic background. This particular patient's mother has seasonal hay fever, ragweed in type. In two other similar cases there is history of perennial asthma in the father of one patient, while in the other case the mother has eczema. Many cases of vasomotor rhinitis demonstrate both a positive skin reaction to some allergen and sinusitis or other intranasal pathology as well. The question arises as to which condition, if either, is secondary to, or aggravated by, the other. Often the best results, in this class of cases, are obtained only by attention to both factors, i.e., by desensitization to or removal of the offending allergen, combined with such local treatment or surgical measures as seem to be indicated.

In the past the statement frequently has been made that intranasal surgery is entirely contraindicated in the allergic patient. The fallacy of this arbitrary viewpoint has been revealed by more intelligent study of this question, and recently the pendulum is swinging back from this radical stand to a broader point of view. An x-ray film of an antrum filled with iodized oil will often show a thickened membrane of more or less density. The same procedure a few days later may reveal a perfectly normal lining membrane with no filling defect. We feel that the thickened membrane of the first film is a temporary allergic manifestation and readily admit the futility of sinus surgery in this condition. Other patients, however, of proven allergic tendency, often suffer from a true, infectious sinusitis, definitely indicating surgery for its relief. Why withhold this measure simply because the patient has hay fever or asthma or other pathology of allergic origin? It would seem that a conservative answer to this question would demand surgical treatment for those cases of sinusitis or other nasal pathology in which surgical treatment is especially indicated, regardless of associated allergic states.

The rhinologist is called upon to treat many types of headache. Possibly the most troublesome, both to patient and physician, is migraine. Certainly many persons suffering from this distressing ailment are allergics, the allergy usually taking the form of sensitization to certain ingested foods. In a series of thirty-three cases of migraine studied by Vaughan more than one-third were found sensitive to certain foods and the symptoms were relieved when these foods were omitted. Rackeman mentions a girl of thirteen "who had had headaches for a year, was a restless sleeper, nervous and emotional. Wheat, eggs and chocolate gave positive skin reactions, and when these articles were eliminated from her diet the child became completely well." It is not always easy to evaluate the food skin test. Many individuals will show strongly positive skin reactions to certain foods, but may eat these foods with impunity and with no untoward results. On the other hand it is true, also, that foods known to bring on allergic manifestations when taken inwardly fail to give reactions when used in skin tests. A third factor may be illustrated by the example of one of my patients who may eat fish or strawberries separately with perfect comfort and enjoyment, but if both are eaten at the same meal he will be seized within the hour with a typical attack of hay fever accompanied by an urticarial rash. This experience has been repeated three times. It would seem that some reaction takes places within the human "test tube"

during the process of digestion of a mixture of foods which we have been unable to duplicate and study on the outside. May not similar conditions account for many attacks of migraine or other allergic reactions in which the skin tests and all other examinations have been negative and whose etiology thus has remained hidden?

TREATMENT OF MIGRAINE

Treatment of migraine has, at best, been unsatisfactory. If an allergic basis can be established desensitization to the offending allergen or its elimination from the diet should give relief. Many drugs have been used and discarded. Recent literature carries favorable reports of two additional drugs, chondroitin-sulphuric acid and ergotamine tartrate, much used lately for relief of the immediate attack. For more permanent effect no single remedy has afforded as much relief at the hands of the author as calcium, preferably in the gluconate form. This should be effective, of course, only in those cases of migraine which are allergic in origin, following the theory that allergic reactions are due to irritation of the vagus nerve depending upon an increase in potassium ions accompanied by a relative decrease in calcium ions. One of my patients who has autumnal hay fever also suffers severely from migraine headaches throughout the year. No allergic basis for the migraine has been discovered, in spite of the other definitely known allergic tendency, yet this patient secures marked relief from headache by taking fifty grains of calcium daily for thirty days every third month. Sadly enough, however, this treatment alone does not control her annual attack of hay fever.

Relief has been given to a number of migraine victims by alcohol injection of the spheno-palatine ganglion on one or both sides. The relief afforded varies in degree and permanency, many patients enjoying almost complete comfort for a period of from two to three years and upward. The treatment can always be repeated if the attacks recur, although each injection tends to become relatively more difficult in technic and less effective in result because of scar tissue formation. This method of treatment seems equally effective in both allergic and non-allergic types of migraine. The injection is always preceded by a diagnostic cocainization of the ganglion during the attack. If the desired effect is produced, the injection is accomplished at a later sitting by the posterior palatine canal route, as advocated by Ruskin.

TREATMENT OF HAY FEVER

For the relief of hay fever many types of treatment have been tried and rejected. Some individuals have been helped and others apparently cured by such local measures as antrum irrigation, submucous resection and cauterization of turbinates, or by internal medication, including alkalinization in some cases, acidification in others and calcium therapy in still a third class. The patients relieved by such measures as mentioned above, however, have been only occasional ones and greatly in the minority. No single principle of treatment, as yet discovered, has proven entirely successful for all patients. In the writer's opinion the one type of treatment which offers the closest approach to this paradise is pollen therapy, and this method has fallen into disrepute, both with laity and profession, because a great number have been disappointed with the results obtained. The fault, however, lies not with the treatment, but with the way in which it has been given. Actual results during the past six seasons, from a plan of treatment to be described, demonstrate that relief ranging from 75 per cent to 100 per cent in each case can be given to at least 85 per cent of the patients to whom pollen therapy is properly administered.

Proper administration includes, first, a correct diagnosis and choice of pollens to be used, followed by treatment with enough pollen to control each individual's particular degree of sensitization. No group of patients can be treated by a set, standardized scale, as each individual patient may have a different level or degree of sensitization. One patient may need only 4,000 units of pollen to protect him while the next may require 8,000 or 10,000 units before his particular level of sensitization is covered. This partly explains why the wholesale treatment of hay fever with standardized fifteen-dose treatment sets has been largely unsuccessful. These sets are standardized for safety in fixed doses to be given at fixed intervals, and are limited to a maximum dosage of 4,000 or 5,000 units. It is my belief that only about one-third of the patients have a sensitization level low enough to receive satisfactory relief from a maximum dosage of 5,000 units. I have had the experience several times of giving almost complete relief, with the use of 10,000 units, to a patient who had received but little benefit during a prior season from one-half that amount. Another reason for the failure of this method is the fact that most of the prepared treatment sets contain as many as five different pollens. Perhaps the patient is sensitive to only two of them. If he receives this shotgun dose he will derive only two-fifths of the benefit which he should otherwise gain from the dosage given. Also, although it is true that nearly every ragweed patient is sensitive to many other pollens, such as corn, goldenrod, sunflower, etc., it is true that he can avoid contact with these comparatively heavy pollens which are not wind-borne, but which fall to the ground when released from the plant. The great majority of hay fever patients of the fall type require desensitization only to the light, wind-borne, ragweed pollen and thus derive the full benefit of the total dosage given.

The technic of pollen desensitization requires detailed attention. First, as said before, an exact diagnosis of the pollen required must be made. About 90 per cent of the sufferers from late summer hay fever in this section of the country are ragweed victims, either of the giant or the dwarf types, or both. An occasional variation to this rule is found, as in one of my patients who suffers from both spring and fall hay fever, the latter attack not appearing until after the first week in September. This patient reacts only to dandelion and to annual sage, certainly a rare combination, and is one of a very few whom I ever found sensitive to dandelion. The diagnosis, preferably, is made by skin tests, using the scratch method and a concentrated pollen extract. Treatment may be started at any time throughout the year, but should not be delayed later than two months prior to the season lest the time prove too short to include the twenty to twenty-five treatments necessary to reach the higher doses of 10,000 units or more. The size of the first dose ranges from one to ten units and is gauged from the reaction to the skin test. The dosage is then increased as rapidly as is consistent with the local reaction. The injections are made intramuscularly and thus practically all of the local discomfort following subcutaneous treatment is avoided. Tendency to systemic reaction due to the relatively quicker absorption of intramuscular injections may be controlled by the use of a tourniquet released gradually. The patient is requested to remain in the office for one-half hour after treatment and adrenalin is kept at hand for free use in event of marked reaction. Also each patient is instructed to carry ephedrine upon his person while under treatment and to take three-fourths grain at once in the event of reaction occurring after leaving the office. The maximum dose of pollen is reached a few days before the first symptoms are due and is continued at weekly intervals throughout at least one-half of the season. If at any time during the season the symptoms become marked enough to cause discomfort, the treatment is supplemented by intradermal injections, starting with two units and increasing the dosage by one unit each day for two or three doses. Often relief is felt with the first intradermal treatment and usually the symptoms are again under control after a maximum dose of three or four units. As a safeguard, this dose is repeated once a week for the remainder of the season.

Internal medication also is valuable. Full calcium therapy is instituted two weeks prior to the season and continued throughout. Ephedrine in doses of three-eighths grain or more is taken upon awakening if catarrhal symptoms are marked, and at any other time as indicated, and is a helpful adjunct to the treatment.

Following the close of the season a year ago I kept a number of patients desensitized throughout this past year by treating them monthly with a comparatively high dosage, bringing them up to the maximum dose again just prior to the 1934 season. Clinically the perennial treatment seemed to give about the same results as the ordinary pre-seasonal treatment, although some investigators report much more glowing results from treatment the year round and express the belief that several years of this regime may lead to permanent relief. Certain other advantages, however, such as fewer injections, much saving of time, fewer chances for reaction, etc., were derived from the perennial treatment. Also a number of the patients noticed that throughout the winter they had fewer colds and less catarrhal trouble than usual, and one boy with generalized allergic tendencies resulting in stubborn eczema of the external ear and in horse asthma as well as hay fever, noticed improvement in the eczema and found also that he could resume horseback riding during the fall and winter months with no return of asthmatic symptoms.

Intradermal treatment is given to those patients who do not seek relief until after the season begins. Results in the majority of cases are excellent, although perhaps not as good as those obtained from the pre-seasonal treatment. This co-seasonal, intradermal treatment is especially adaptable to children to whom the long course of pre-seasonal injections is particularly irksome and in whom, also, the results of co-seasonal treatment seem especially effective. In fact, several of my younger patients in whom both methods have been used now are not brought in until the season has commenced, the parents feeling that just as good or better results are obtained by the comparatively simple co-seasonal treatment. Very often relief is apparent after the first or second treatment and sometimes even after the skin test.

EFFICACY OF POLLEN TREATMENT

Pollen treatment is not 100 per cent effective nor does it result in permanent cures, but the author believes that this method is the best at our disposal at the present time and that the great majority of patients can be assured that, with proper cooperation, they may receive a high degree of relief from the distressing symptoms of hay fever and associated asthma.

DISCUSSION

JOHN W. CARMACK, M. D. (Indianapolis): The subject of allergy is indeed a large one. The more I see of it myself the more I am coming to believe that every person, or a great many people, given certain conditions, are potential allergics and that we, as otolaryngologists, working in the field where we see the local manifestations, must always have those things on our minds. We cannot sit down in front of any patient, regardless of the situation, and dismiss the idea of possible allergy.

I have in mind a young man who had no history of allergy, who, at the age of twenty-two, was working in a flour mill. He had been there for a number of years, but this particular year the fans were out of order and he came in contact with and inhaled flour dust, and he became one of the most violent allergics that I have ever seen. We may all be potential allergics, and given a certain set-up we may develop allergy to most any sort of protein.

There are two distinct factors which have to do with this subject of allergy. Back of this whole thing is the nervous set-up and nervous mechanism of the particular individual, and in our search for a true rating of these allergics, that is the thing we do not take into consideration sufficiently. Unquestionably, the sympathetic nervous system has a very important part in this thing called allergy.

The next thing that the allergists and biochemists have told us is that there is a very definite disturbance of fluid transference in the tissues, and particularly through the cell walls. There is in some way, either due to nervous control or due to a chemical alteration, a disturbance of the transference of fluids from a cell membrane to the outside, or vice versa. Those two things we have established as definitely as we can from our biochemists and allergists—first, nervous mechanism, and, second, disturbance of diffusability of fluids.

I am only going to say a few things, so will first consider the management of these people. It is the belief of many of our investigators that there is an inherited tendency in all allergics, and I am sure that most of you believe that. So when we are searching for evidence of allergy we must never stop until we go back two or three generations in search of some form of allergic manifestations, irritability in the nose, skin, migraine type headaches, or any of the allied things which are probably related to the thing we know as allergy. In the first place, the history probably is the most important thing we have to depend upon because skin tests are not 100 per cent reliable. Skin tests are proper and important, but preparations used on the skin are not stable, and unless fresh may not be reliable. Many of you have had cases in which you have demonstrated an allergy, in which there was no skin reaction. I believe the most important feature of the treatment now, and the one we have neglected most, is attention to the individual patient. I do not mean the particular dose of the pollen extract or whatever you are going to give, whether pollen, bacterial extract or what, but it is a study of the individual case and an attempt to bring about adjustment of that individual, his mental state, his environment, any of the things which tend to upset the sympathetic control of the individual. I believe this is one of the great reasons for the failure of so many of the extracts or desensitizing agents. You may have the right agent, but you may also have an unhealthy environment in that individual which will not let the condition clear up until corrected. Attention to the environment, to the mental set-up of the individual, will correct and increase the percentage of good results. Let me leave that thought of adjustment of the environment of the allergic case.

It is a well known fact that the application of silver nitrate and trichloracetic acid to the nasal mucosa or even minor operative procedures will often produce the same temporary relief that is had by the so-called ionization treatment.

F. V. OVERMAN, M. D. (Indianapolis): I would like to have Dr. Craft explain how extensively he uses trichloracetic acid?

K. L. CRAFT, M. D. (Indianapolis): In using trichloracetic acid for cauterization purposes I start with very small doses of the concentrated acid—only two or three pin-point applications, usually to the middle turbinate where most of the sensitization is found. At the next and succeeding sittings the acid is applied at different points. The treatment is continued in this way until the sensitized part of the mucous membrane has become toughened and resistant to the irritating influences of dust, smoke, pollens, etc.

F. V. OVERMAN: Do you get any actual burn?

K. L. CRAFT: No, I try to avoid that entirely. This is a toughening and desensitizing process without destruction of the mucous membrane.

C. H. MCCASKEY, M. D. (Indianapolis): I wish to make a few remarks concerning hay fever.

Dr. Craft's paper was excellent and has to do with the treatment of hay fever mostly by the extract method, which is a very safe and comforting method to the patient. Now I wish to speak relative to the treatment of hay fever by zinc ionization. I do not know much about it; however, I have had some experience with it. I was approached concerning the (ionization) machine, but hesitated to purchase it until I had tried it out by treating a number of patients at the City Hospital for a period of two months. Most of these patients had relief from the conditions from which they were suffering.

When you speak of allergic rhinitis there are two types, the inhalation type and the type due to ingestion of food substances. Therefore, you have this premise to work upon.

There was much propaganda from the salesman, which I swallowed with a grain of salt, but the end results in the twenty-six patients which I treated were, I would say, about seventy per cent good. They varied in results—there were five in which it was an absolute failure. Of course, you wonder why it failed in five when the results were good in others.

We have taken a biopsy of the nasal mucosa at the time of first ionization, taken it three or four days later and as long as two weeks later, and had it sectioned each time. We have not had time to observe it six months later. Some observers make the statement that photo-micrographs of the mucosa about the area involved in treatment showed the cilia to be present and the nasal mucosa to be normal in appearance. We have heard much comment about the end results, whether or not it would produce atrophic rhinitis, etc. Examination of the nasal mucosa at the end of ten days usually showed considerable mucus dried in the nose. At the end of three weeks that had disappeared and the nasal cavity appeared normal. I am not completely "sold" on it; I have tried it out and will do so again.

Here is a point for consideration. At the hospital we had the most chronic cases to deal with—most of them of from twenty-five to thirty years' standing—all tough, in the common vernacular. We are feeling our way and may have to discard the whole thing, but it should be given a fair trial. If the people who manufacture the machine will do as they say they will, and if somebody doesn't come out with another machine and sell it to every Tom, Dick and Harry, who knows nothing about eye, ear, nose and throat diseases, we may get somewhere. The manufacturers have agreed to limit the sale of their machine to established, reputable otolaryngologists. If they will keep it in that field they won't get into much trouble with the machine.

E. N. KIME, M. D. (Indianapolis): Since the question of zinc ionization has been opened I would like to ask what the technic is, first; and, second, I would like to have someone elucidate the biophysical principles underlying the method. What do they do and what is the reason for doing it?

C. H. MCCASKEY, M.D.: The only technic there is simply is that of using an electrode and a solution which is a preparation of cadmium, zinc and tin, and passing the current through the electrode, which is of the same material. This is wrapped and inserted in a saturated cotton pack to deposit the metals on the nasal mucosa. I do not know the electro-therapeutic processes that go on. Somebody in St. Louis has written of taking the sinuses of cats or dogs and showed in the tests positive zinc and changes in the submucosa through deposits in the blood vessels; in fact, there is not much to know about the processes that go on. We use measured doses, much like Dr. Craft's dosage of vaccine. A set dose cannot be decided upon for all cases.

This is not the type of allergy in the sense that you have food allergy; this treatment is for allergy which is due to inhalation and thereby desensitizes the mucosa at point of absorption.

1002 Hume Mansur Bldg.

WAYNE COUNTY MEDICAL SOCIETY, DETROIT, DEMONSTRATION

WILLIAM J. BURNS

Executive Secretary of the Wayne County Medical Society, DETROIT

Sociologists tell us that in the distribution of medical care there are three classes—the rich, the poor, and the middle class.

The Wayne County Medical Society believes there are four classes, all of which procure medical care in Detroit:

(1) The Well-to-Do—Have the ability to secure medical care when necessary. No organization problem.

(2) The Unemployed on Public Charity (Welfare Group)—Medical-Dental Bureau of the FERA, Wayne County Medical Society Building, 4421 Woodward Avenue, Detroit.

(3) The Unemployed NOT on Public Charity—Medical Aid-Dental Aid, Wayne County Medical Society Building, 4421 Woodward Avenue, Detroit.

(4) The Employed on Small Wages or Salary—Wayne County Medical Society Bureau, Wayne County Medical Society Building, 4421 Woodward Avenue, Detroit.

This last group is the important class under discussion today. The Wayne County Medical Society plan, originated by Dr. Ralph H. Pino of Detroit, was carefully scrutinized by the Wayne County Medical Society for more than eighteen months before it was approved by the society's council, February 16, 1934. The board of trustees then appropriated sufficient money to inaugurate and maintain a bureau to put the plan into operation.

The purpose of the Wayne County Medical Society Bureau is to assure employed people of modest income that they can go to the physician, dentist, hospital, etc., of their choice and receive necessary medical service when they need it. Further, the bureau works out a plan for them whereby the account can be paid from week to week within a year's time or less (no more than fifty-two payments).

EMPLOYERS CONTACTED

Ground work: A skeleton staff was organized and started working in February, 1934. It first contacted employers, starting with the largest industrialists. These employers of labor were interested immediately. At the present time, 35 large industrialists and a host of small employers, with an average employment of 250,000 employees, are using the bureau. It is interesting to note that there are 2,000 employers in Detroit and Wayne County, Michigan, and the work of contacting these men merely to explain the scope of the bureau will take one man two years' full time. In contacting

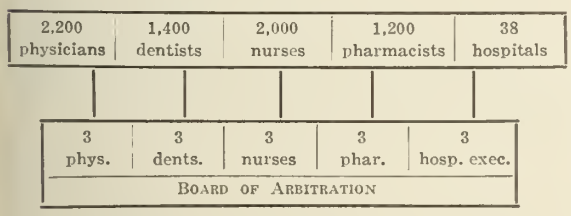
* Presented at Secretaries' Conference, Indiana State Medical Association, Indianapolis, January 27, 1935.

industrialists, we ask them to do three things: (a) to give us accurate credit information, verification of job, etc.; (b) to let the workers know that their ills can be treated, on a fair basis, with the patient having free choice of doctor, hospital, etc.; (c) to assist us in collections by: (1) pay roll deductions; (2) employee loans; (3) cooperation, such as assurance to the employee of a permanent job. On the other hand, industry has asked the bureau: (a) that all deserving employees receive service; (b) that a complete service be rendered; (c) that a centralized bookkeeping be maintained in order that the industrialists may have only one center with which to deal.

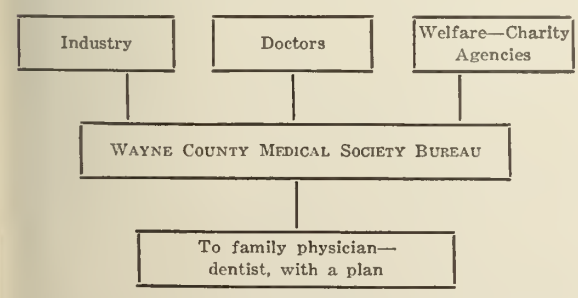
DEMONSTRATION IN PROFESSIONAL COOPERATION

Our bureau assistants next contacted the doctors. The staff of every hospital heard about the plan and approved it. The cooperation of the superintendents of the hospitals was asked for. Next the dental, nursing, and pharmaceutical groups were interviewed and gave the bureau a vote of confidence. A demonstration in cooperation between the five professional groups, physicians, dentists, nurses, pharmacists, and hospitals was thus inaugurated and all are working together to give service to the employee, with the additional cooperation of the employer and of the social agencies.

DETROIT'S PROFESSIONAL GROUPS



Immediately the patients started coming to the bureau, referred in the main by the welfare directors or personnel chiefs of the industrial plants. Please note that no publicity was given out by the bureau, except the contacts with the key men in industry, and with the professional groups who were to serve the people. The sources of referred patients are as follows:



The review of an interesting case will typify the mode of procedure: An employee of a large concern was on his way to the county building to obtain free tax-supported medical service. He had what later proved to be appendicitis. He mentioned his purpose to the factory welfare officer who referred him to the Wayne County Medical Society Bureau. The bureau's social service investigation brought out the fact that he was hesitant about returning to his own family physician because he owed a small bill for his wife's obstetrical work in 1931. The bureau smoothed the way for the worker so that the physician immediately performed the necessary operation. The employee was able to make a small weekly wage assignment, convenient to his budget, to liquidate the current hospital and physician's bill, as well as the old account which had been bothering him for years. He was delighted to find that he had no interest, assessments, or service charges to pay. It is interesting to note that the Wayne County Medical Society Bureau is in effect the doctors' own social service investigator; that all the medical work is performed exactly as in private practice, without disruption of personal relationships or time-tried traditions, the bureau working with all doctors, members of the society or not, to preserve the family physician-patient tie; that the bureau merely aids the physician in ofttimes embarrassing economic details. The physician and the hospital set the fees, not the bureau.

ALL ACTIVITY CENTRALIZED

In order to secure the industrialists' full cooperation, the plan includes centralized bookkeeping, collections, and monthly distribution of payments to each cooperating physician, hospital, dentist, and nurse. A service fee of 10 per cent on actual collections is made by the bureau. Employers deal with one center, not 6,800 units. Industrialists are beginning to lean on the bureau to aid them in many of their health problems. To my knowledge, Detroit has no commercial, industrial, or employee operated plans of health or sickness insurance; laymen find such organizations with their mountainous costs, detail, and extra work are unnecessary, as they find just what they are seeking in the Wayne County Medical Society Bureau. The most important feature of this plan is that it places complete medical and hospital services within the reach of every worthy patient and provides an easy payment plan for the settlement of medical bills.

Charity seekers, who are not worthy of such relief, are being discouraged in Detroit, because the welfare officials now have some place to which they can refer such applicants. The majority of these patients sought charity because they did not have sufficient cash reserves to meet the full fees incident to a medical emergency. Their prime need was credit—not free medical care. Already many families have been spared the humiliation of charity by the alert cooperation of the investigators in Detroit's public charity institutions, who refer these patients to the bureau.

AN AMERICAN SOLUTION

The Wayne County Medical Society plan removes a large proportion of the financial reasons for delaying necessary medical care. It helps maintain the self-respect of the individual. It seems to be an American answer to the problem of medical care for the wage earner who is without cash reserve.

It is interesting to note that in the first eleven months of the bureau's existence, to the end of business on January 25, 1935, 1,634 cases were served by the bureau. Total business done by physicians, hospitals, dentists, etc., amounted to $134,560, and collections in the shape of one, two, and three dollars per week, with occasional larger payments, totaled $39,743.05.

Candidly, we have placed a governor on the bureau's activity. We could do far more work, make more speed, but we do not wish to be swamped, because after all this is just an experiment, a demonstration, a test tube. A bucketful of activity would overflow the test tube and ruin the experiment. Ours is an evolutionary progress—not a revolutionary change.

The professional groups, the industrialists, and the Detroit people served, all believe in the success of this experiment. The underlying principles are right, even though changes and improvements will have to be made from time to time, and difficulties and snags must be overcome.

One snag is lack of capital necessary to serve the greatest number. A solution is the proposed creation of a revolving fund sufficient to cover a maximum load of 2,000 patients per month. The hard-headed business men and industrialists of Detroit are being asked to contribute half the fund, and although this proposition has been broached to them just recently, I feel they see the advantage to their employees and will cooperate. And—here is something strange to relate! There are two foundations in America which seem to be not overly enthusiastic over the plans of the sociologists for the administration of medical care. It would appear they do not relish American medicine entering the World Court of European Mistakes, perhaps feeling that sufficient errors can be made on this side of the Atlantic without copying those of our European neighbors. Suffice it to say, we have good hopes that the sum invested in the revolving fund by the industrialists will be matched by the foundations referred to which seem to want to make a *real* demonstration of the Detroit plan. With a revolving fund, the Wayne County Medical Society Bureau can increase and multiply its humanitarian work on behalf of the public.

The allied professions of Detroit feel—and are demonstrating—that complete medical care can be supplied those who need it, not through government or political agencies, but through the sane and unselfish work of the individual physician, dentist, nurse, etc., coordinated by the county medical society.

ABSTRACTS

THERAPEUTIC EXERCISE

J. S. COULTER and C. O. MOLANDER, Chicago (*Journal A. M. A.*, Jan. 12, 1935), define therapeutic exercise as the use of scientifically supervised movements of the body, with or without apparatus, for the purpose of restoring diseased or injured tissues as near to normal function as it is possible. There are two types of therapeutic exercise—passive and active. In this issue of THE JOURNAL the therapeutic exercises for the shoulder joint, under supervision, are given and also a list of exercises for the shoulder are suggested for home use after the range and strength of the muscles of the shoulder have been increased in all planes because of the carefully regulated assistive, free and resistive exercises.

CIGARETTE SMOKE

Michael S. Mulinos and Raymond L. Osborne. Pharmacology of Inflammation: III. Influence of Hygroscopic Agents on Irritation from Cigarette Smoke. *Proc. Soc. Exp. Biol. & Med.*, 1934, 32, 341-345. A successful attempt to measure objectively the irritant properties in cigarette smoke is reported. The method used was that described by Hirschhorn and Mulinos: *Proc. Soc. Exp. Biol. & Med.*, 1930, 28, 168. A study of the influence of hygroscopic agents on the edema produced on the conjunctiva of rabbits is given. The hygroscopic agents most commonly used in cigarettes are glycerine and diethylene glycol. It was stated that, "It is obvious that the cigarettes which have been made with diethylene glycol as hygroscopic agent prove to be less irritating than those with glycerine." Not only was the irritation greater in the case of glycerine than from diethylene glycol, but it lasted a longer time. It is further stated that "The edema produced by the smoke solution from the untreated cigarette lasted an average of 31 minutes (8-82); that from the diethylene glycol lasted 8 minutes (0-21); and that with the glycerine lasted 45 minutes (17-122)."

THE BEST PAID MAN IN THE WORLD

The physician is the best paid man in the world. He is required to have an education which will be a benefit and a comfort to him all the days of his life. He wins a degree and he attains the honorable title of doctor. He learns to know more intimately his fellow man than any one else can know his fellow. He gets praise for many things that he does not deserve and providence and disease are blamed for his mistakes. He wins the gratitude of those he serves. His charity work is invaluable to his experience. If he is reasonably conscientious and works reasonably hard he builds a practice that will insure him a good house, office and automobile and enable him to rear and educate a family and to stand the losses of the inevitably foolish investments he makes. If he has a taste for invention there are innumerable unknown instruments and improvements awaiting him. If he wishes to discover, the laboratory is ready for him. If he likes research the facilities and libraries are available. If he craves adventure insidious dangers lurk around him and there are ever pioneer fields to enter. In his endeavors his government, his community and his fellow physicians stand ready to aid him. He is an advocate without a jury, a judge without a court, a minister without a surplice, a business man without guile, a farmer whose soil is the human body and whose crops are human health and happiness and he is a laborer without a boss. The physician is the best paid man in the world.—Beverley R. Tucker, M. D., in *Virginia M. Monthly*, April, 1934.

Federation Bulletin, January. 1935.

THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION
DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

Office of Publication: 1021 Hume Mansur Bldg., Indianapolis.
Editor: E. M. Shanklin, M. D., 5141 Hohman Avenue, Hammond, Ind.
Managing Editor: Thomas A. Hendricks, 1021 Hume Mansur Building, Indianapolis
Editorial Board:
F. T. Romberger, M. D., Lafayette.
T. B. Rice, M. D., Indianapolis.
Pierce MacKenzie, M. D., Evansville.
L. P. Harshman, M. D., Fort Wayne.
Ernest Rupel, M. D., Indianapolis.

MARCH, 1935

EDITORIALS

MR. MILBANK SPEAKS

The guest speaker at the annual conference of secretaries of the county medical societies of Indiana, January twenty-seventh, was Mr. Albert G. Milbank, president of the Milbank Memorial Fund, New York. A word as to the events leading up to his coming to Indiana on this occasion might be in order.

Dr. A. M. Mitchell of Terre Haute, chairman of the county society secretaries, contacted Mr. Milbank several months ago, and later had several conferences with him, two of these in Mr. Milbank's New York office. In these conferences, and at the suggestion of the official family of the Indiana State Medical Association, the whole question of various funds and foundations in their relation to the profession of medicine, particularly having to do with what has come to be termed "medical economics," was under discussion. Dr. Mitchell reported as to his observations during these conferences, and it was decided to invite Mr. Milbank to come to Indiana, there to express his views on this important question. His complete address appeared as a supplement to The Journal for February.

Mr. Milbank proved to be a gentleman in every sense of the word, a man of unusual educational attainments, and possessed of a most pleasing personality. Though a member of the New York Bar, seldom did his address reflect the argumentative attitude so common to members of his profession; rather did he apparently wish to convey the impression that he had come to talk matters over with members of the Indiana medical profession, to endeavor to iron out possible misunderstandings, and to enable the fund management henceforth to pursue a program more in common accord. The closing paragraphs of his masterly presentation would seem to bear out this belief: "A recognition by the interested parties of these principles will furnish a sound basis for a cooperation that will be mutually helpful. In this spirit I tender you our assistance and I ask for your help."

Nor does he fail to recognize that our profession has more at stake than any other in this nation-wide subject of socialized medicine, for he says, early in his address, "This evening I would like to develop affirmatively the position of the fund in the field of health and the relations it would like to see established between it and all the other groups operating in that field in which, of course, the members of the medical profession are obviously preëminent."

Milbank's marshaling of the many causes of the present state of affairs is well done; he sums up the whole matter in one brief sentence: "The world is in a turmoil of conflicting philosophies." He does not wholly blame this on the World War, but states that the present battle of conflicting ideas and interests was bound to come sooner or later; the great war merely hastened it.

The speaker explained in some detail as to the creation and operation of the Milbank Fund and then proceeded to discuss the group of proposals tendered some time ago by the fund staff; he makes the point that these principles are not at great variance with those more recently adopted by the A. M. A. and the American Dental Association, as well as other professional groups. Then Mr. Milbank strongly avers his faith in the all-important dictum that in any and all considerations of the problem, the relation between physician and patient must be maintained. In common with most laymen who have publicly discussed the subject, and this opinion is held by a considerable group of physicians, Mr. Milbank speaks of the physician keeping his pay patients, in the event of a state or federal health insurance program, the while converting his free list into at least a part pay group. In our personal experience this point continually crops up when we are discussing health insurance with laymen.

Speaking on the same phase of this subject, Mr. Milbank warns against the evils that have beset compensation acts in many of our states: the ever-present malingerer, the racketeer, and the chiseler, not forgetting the ubiquitous politician. Again does the speaker stress the important place the medical profession occupies when he says:

"Personally, I would have little faith in seeing achieved the full results hoped for without the cordial cooperation of the practicing physicians. Laws are not self-enforcing. To become effective they must have the support of public opinion—in this case medical opinion. Plans on paper are sterile unless vitalized by human energy. While it would be too much to expect unanimity in your profession, I would hope that the predominating opinion may crystallize in favor of some plan for mutualizing the costs of medical care that would meet the needs of that vast group of our people who are neither well-to-do nor wholly destitute and who

cannot, as individuals, budget their medical costs, but who as members of a group can do so, and would also make provision on a more satisfactory basis than at present for the medical care of the indigent sick."

This, to us, is one of the high lights of the address. A merited and well-directed criticism of our profession then follows:

"Is there not some truth in the statement that part of the hostility to foundations concerned with the public aspects of health is due to the failure of the medical profession to take an active part in the public health movement during its early stages?"

We might well refer to our own state in this regard; who can deny that health matters in Indiana would not be incomparably improved had the present relations between the Indiana State Medical Association and the Indiana Division of Public Health been in existence these past fifty years, rather than for the past two years?

Mr. Milbank then proceeds to sum up his case in a very clever manner, considering the fact that he must have embarked for Indiana with a feeling somewhat akin to that of Daniel when he set forth on his visit to the lions. As we have said, he came not in an antagonistic spirit; he did not brandish the flag of "Red Medicine;" he came as an intelligent, thoughtful, considerate gentleman, solely with the desire to meet a progressive group of professional men, there to discuss with them things that seemed to him worth while.

We congratulate Mr. Milbank on his scholarly address and its masterly presentation. We believe him to be honest and sincere, though mistaken, in his beliefs. We honor and admire a man who has the courage of his convictions and is unafraid to beard the lion in his den. It is with pleasure that we listen to a scholar and a gentleman; it is with pleasure that we attune our ears to his offer of true and mutual cooperation; it is with pleasure that we acknowledge his courage, his courtesy and his frankness; but it is disconcerting to find an illustrious member of the bar defending those who would tell the medical profession how to mend its affairs in ways leading inevitably to political shackles.

However, we again quote his closing remark: "In that spirit (of cooperation) I tender you our assistance and ask for your help."

IS THE DEATH RATE TURNING UPWARD?

We have for many years observed with much satisfaction the fact that each succeeding report of vital statistics showed the death rate slowly but uniformly falling. There were those who were foolish enough to suppose that this was an established trend which might be counted on to continue more or less indefinitely. Students of vital statistics have been warning us for years, however, that such was by no means the situation, and that the low rates of recent years are the effect of rather prodigious efforts on the part of health authorities, the medical profession, the various lay organizations, and of economic conditions which had enabled the population to live on a higher and higher level.

With the coming of the years of depression many persons expected the death rate to rise immediately. They were not familiar with the fact that there always is a long "leg period" in such relations. Much consolation was derived from the fact that last year that rate was still downward, and that four years of depression had left no mark on vital statistics. It was even claimed by some that inasmuch as we were compelled to live on a simpler plan that there might actually be genuine benefit to the public health. Now it becomes too apparent that the real truth is coming out. The general death rate not only in Indiana but in many or perhaps all other portions of the United States, is definitely turning upward. Whether this upward trend will continue or not is something that can not be answered at this time. We are very much inclined to think that it will do so.

Striking, indeed, has been the increase in organic heart diseases, which shows almost 50% gain over last year. A considerable portion of this is due to the fact that the basis for compiling heart disease data has been changed. It is also due in considerable measure to the fact that because of unemployment a great number of "cardiacs" have lived longer than they would have lived if normal conditions had continued. During 1934 a considerable number of these people have gone back to work either on relief jobs, or at regular forms of employment. A great number of breakdowns have been definitely ascribed to this factor. Other degenerative diseases such as apoplexy, Bright's disease, cancer, and diabetes, are upward. Accidental deaths of all sorts are increasing, as is well known. Pneumonia comes back to what is essentially normal, after having been at a very low figure last year. Infant deaths are up, due probably to the unusually hot summer, the large amount of measles, and probably to the fact that many homes, for financial reasons, are unable to take care of their children as well as they should. Tuberculosis and diphtheria both reached the lowest levels they had ever attained.

It is very interesting, indeed, that birth rates are up somewhat. This is largely due to the fact that there has been as a result of the economic difficulty, a holding back on the part of many young people who would otherwise have married. With the upturn in business conditions, there has been a very considerable increase in the marriage rate, and it is likely that a good many couples who have refrained from having children are now taking less precautions against the possibility of conception.

PUBLIC HEALTH ADMINISTRATION*

The most fundamental factor in the foundation of public health administration is confidence. Any efforts of a health department without confidence on the part of the public in general, and the medical profession in particular, would be in vain.

Your State Division of Public Health in the past year has tried to shape its program around principles which would encourage that spirit of confidence. Let us not confuse 'health' schemes with the established institution of public health. Public health administration is a branch of the medical profession and should be under persons licensed to practice medicine. Public health must not be confused with medical relief. The former is for all the people regardless of the economic and social strata, while medical relief is for people in the lower economic scale.

The State Division of Public Health has outlined what are considered by it to be the proper functions of a health department:

A. Registration of morbidity, births and deaths.
B. Control and prevention of disease.
   1. Quarantine of communicable disease.
   2. Environmental sanitation.
      (a) Purification of water supply.
      (b) Proper sewage disposal.
      (c) Safeguarding food and milk supplies.
      (d) Proper housing.
   3. Epidemiology.
   4. Public health laboratory.
   5. Public health nursing.
   6. Control of venereal disease.
   7. Public health education.

The accomplishments and activities of the Division of Public Health in 1934 are outlined:

1. Indiana was admitted to the United States Morbidity Registration Area in 1934.

2. The field of public health nursing was more clearly defined and many of the old misunderstandings eliminated. This was accomplished by closer cooperation of the Bureau of Public Health Nursing with the county medical societies.

3. Brochures compiled by a committee of the State Medical Association were printed and distributed by the Division of Public Health to physicians and county medical societies.

4. Inauguration of the distribution of arsenicals to physicians for indigent, infectious syphilitic patients.

5. A sanitary survey was conducted by the Bureau of Industrial Hygiene for the industrial concerns in the major cities of the state. Recommendations for improved sanitation were complied with in every instance.

6. Better sanitation of the dairy products industry has been accomplished by a cooperative plan worked out with the industry.

7. Advantage was taken of government funds through PWA and FERA. Many improvements were made in city water supplies and sewage disposal systems and plants.

8. More than 12,000 sanitary privies were constructed in situations where sewers were not available, under supervision of the Division of Public Health and United States Public Health Service. Materials were furnished by the property owner and the labor by the FERA.

9. It is estimated that approximately 200,000 children received immunizing doses of diphtheria toxoid as a result of the state-wide campaign sponsored by county medical societies, the State Medical Association and the Division of Public Health. Reports indicate that only half of these received material supplied by the state. The mortality rate of diphtheria was lower by about 16 per cent than for the previous year. It is not believed that the immunization campaign was wholly responsible for this reduction, but it was perhaps a factor.

10. The results of the program for education in child and maternal hygiene have been gratifying. The cooperation of the county medical societies in conducting meetings and furnishing speakers has been encouraging in most instances. More help from the Division of Public Health to the societies would be desirable.

11. Pasteur treatments were administered to 808 persons in 1934. Six hundred thirty-one were residents of Marion County and 177 from the other counties combined.

The State Division of Public Health believes that our present method of handling persons exposed to rabies is not only obsolete, but is perhaps contributing to the incidence of rabies. Pasteur treatment can be rendered by any physician in the same manner in which diphtheria antitoxin is administered to indigents. If the tax load for the treatment of such persons is placed on the local taxing unit it is believed that unit will be made to feel the responsibility of the stray dog situation.

The Division of Public Health appreciates the fine cooperation received from the Indiana State Medical Association and the county medical societies in the past year for their part in the public health program.

* This material was presented by Dr. V. K. Harvey, secretary of the Indiana Division of Public Health, before the Council of the Indiana State Medical Association, January 13, 1935.

RURAL SANITATION

We doubt if there has been a more significant health activity than that which has been responsible for the building of literally hundreds of thousands of sanitary privies in the United States during the past year or so. In Indiana alone there have been more than 14,000 such out-buildings constructed, at a minimum expense to the property owner. This has given a great deal of work to men who otherwise would have been on charity, and the wages of these men and the cost of materials have been turned back into circulation.

In addition to this, it has made a notable contribution to the welfare of the people of the state from the standpoint of health. It is doubtful if in a civilized community there is anything so disgusting as an outhouse or privy which has not only been an eyesore and a jolt to the olfactory sense, but has been a positive menace to health from the fact that flies and small animals have access to the vaults, and from the fact that ground water was often contaminated.

Those in charge of the work of building sanitary privies have often been subjected to ridicule and the whole project has been held up to scorn by a great many people who should know better. There are, of course, always those in the population who are never quite willing to accept the world as it is made. They would have us believe that the only thing worth considering is something that is beautiful, idealistic, and altogether a product of "cultuah." We should like to call the attention of those people to the facts of life as they are, and that the healthy human body, as well as the sick body, must of necessity discharge its waste into the environment. In such case, the sensible individual is compelled to take the position that since the world is made as it is, we must make the best of it and take care of these offensive wastes in a way that is compatible with health and comfort. We are much afraid that many a poetic mood has in the past died a-borning when the zephyrs of spring brought a certain well-known odor to the nostrils.

Decency demands that adequate provision should be made by every family and every community for the disposal of its wastes. A community or a family that does not have this innate sense of decency deserves to be sick. Unfortunately, however, we can not be sure that they alone will suffer. It is likely that other persons who take better care of their wastes will suffer also. Every home should have sewer connections when that is possible, and every sewer should end in a sewage reduction plant which will purify the water before it is turned into our open streams. When it is impossible, however, to have such sewer connections, every home should have a septic tank, a sanitary cess pool, a sanitary privy, or some other adequate means of taking care of such wastes.

EDITORIAL NOTES

GOAL: 300 NEW MEMBERS IN 1935. TO DATE: 76

How many counties will be in the 100 per cent group this year? We will carry each month, in black face type, the names of those counties that have a 100 PER CENT paid-up membership. It is a place of honor!

DO NOT overlook the fact that your federal income tax report must be in the mails not later than midnight of March fifteenth. Address your report to the Collector of Internal Revenue, Federal Building, Indianapolis. The collector gives advice as to how to prepare the report in THE JOURNAL for February.

THROUGH the courtesy of Mead Johnson and Company of Evansville, the lower half of our front page has been released and the company will continue its advertising on the inside pages. The front cover will carry only the table of contents for each issue. We are sure that the regular reader will be pleased with the new arrangement.

The chairman of the section on medicine of the Indiana State Medical Association would like to have submitted the titles of papers for his section proposed for the next annual meeting of the Association, to be held October 8-10, 1935, in Gary. All titles should be sent to the chairman, Dr. Beaumont S. Cornell, 435 Lincoln Bank Tower, Fort Wayne, and should reach him before April 1, 1935.

A QUESTION has recently been directed to the State Board of Medical Registration and Examination as to whether internes are legally permitted to administer anesthetics; it has been answered in the affirmative. The question then arises, if the hospital employing the interne collects and keeps the fee, what then? Secretary Davidson advises that he has not yet answered this question!

DO NOT forget that we are campaigning for 300 new members for 1935. We want to go to the Gary meeting in October with a total of 3,000 members. Come to think of it, have *you* paid *your* 1935 dues? Better get that matter attended to before setting out in quest of new members. Do not overlook the fact that February first meant delinquency and that a delinquent is not eligible under our medical defense rules.

THE question of a possible relationship between aluminum and the incidence of cancer seems to be perennial. In an interesting review of a paper in the July issue of the *Annales de l'Institut Pasteur*, appearing in the December 1 issue of the *Journal of the American Medical Association*, further negative evidence is reported in a carefully controlled series of experiments with rabbits.—*Bulletin*, American Society for the Control of Cancer, February, 1935.

SOME time ago we noted the change in editors of the health column of the Chicago *Tribune*, for years so ably conducted by Dr. W. A. Evans, and then succeeded by Dr. Irving S. Cutter, dean of Northwestern Medical School. At the time we de-

plored the retirement of Dr. Evans, but predicted a continuance of the column under the pen of Dr. Cutter. Our predictions are verified from the fact that the pronouncements of Dr. Cutter are keen, timely, and highly informative. Such writings do much to further the better interests of the profession.

WE HAVE found a new use for the A. M. A. medical directory, that of checking up these "eminent doctors" who so freely—and effectively!—hand out advice on health matters over the air. These old boys—for they all claim years of experience—sure do strut their stuff. The claims they make put to shame the patent medicine ad writers and the "come on" artists employed by "men's medical specialists" of days agone. Some of our boyhood acquaintances seem to have been born anew and we again hear of the "marvelous" properties to be found in a bottle of Peruna, the tonic made famous, years ago, by an Ohio physician. If any of our national institutions need cleaning up, radio should come in for first attention; even laymen are complaining about the exorbitant claims now being broadcast.

IT IS absolutely essential to the future progress of your magazine that you support those advertisers who support your magazine. If an advertiser offers samples or literature month after month and gets no response, he is not to be blamed for withdrawing from a magazine that has so little support from its readers. We know that you read THE JOURNAL, and that you read the advertisements, probably making mental notes of the products advertised, probably saying to yourself, "Well, I use most of these products regularly." Write to the advertiser and let him know that you use and like his products, and above all, let him know that you have seen his advertisement in THE JOURNAL, and that you appreciate his support of your magazine. The value of THE JOURNAL as an advertising medium depends wholly upon YOU.

WE HAVE received several letters referring to editorial comment we had made concerning the ruling of the Indiana State Board of Medical Registration and Examination in connection with anesthetists. Dr. Davidson, secretary of the board, advises that he has had many letters; also, so it seems, the matter has aroused quite some discussion. It may be a coincidence, maybe a pest, for all we know—but the great majority of the letters we have received have been from one of our larger up-state cities; each letter of this group advances the same argument *against* the ruling of the board, yet two or three letters from the same city strongly uphold the board. We are inclined to the opinion that the rank and file of the Indiana profession is in favor of keeping the practice of medicine in the hands of those duly licensed, hence we shall continue to uphold the medical law of the state.

ALONG about the holidays the Ananias Club holds its annual contest to decide the lying championship of the United States. The press gives full notice to this interesting event and for the past few years we have been amused at some of the tall stories entered therein. The 1934 championship was awarded to the man who told of the prowess of a mule he owned, and while the story was very well done it seems to us that had a southern Indiana man entered the lists the other contestants would have immediately become discouraged. In the New Harmony *Times* of recent date occurs the following tale of doings down in Posey County; we submit it as evidence of the fact that the world's champion liar resides in that section of the state:

"About two years ago Ray Clark was out hunting on the Jim Streamer farm near Bugtown. His dog chased a rabbit into a ground hog hole. The hole caved in and Clark was never able to dig the dog out. Last week Streamer and Euge Benton were digging a cistern at the Streamer home and as luck would have it they dug up Clark's dog, hale and hearty, with part of the rabbit still in his mouth."

WHILE it is said to be the height of impropriety to examine into the dental accessories of a gift horse, yet such a procedure sometimes brings to light interesting information as was evidenced by the recent experience of the secretary of one of our larger county societies. An invitation was received from the president of a pharmaceutical concern suggesting that his company would be very glad to have the members of this society as its guests at an informal dinner and entertainment; that following the dinner various amusement enterprises would be indulged in, during which time the officials of the company would like a few moments to discuss their products. Something about this invitation aroused the sleuthing instincts of the aforesaid secretary, who immediately began a check-up which elicited the information that the entire group of products of this company were non-Council-accepted; further, that there were other considerations that would seem to prevent an ethical medical society from accepting such an invitation. The matter was presented to the society council which voted thumbs down. All of which again suggests that it is well to be a bit inquisitive occasionally.

100 PER CENT COUNTIES

CARROLL—E. H. Brubaker, secretary.

NOBLE—W. F. Carver, secretary.

HANCOCK—(Physicians and Dentists), J. L. Allen, secretary.

GIBSON—O. M. Graves, secretary.

REPORT OF SPECIAL SESSION OF THE HOUSE OF DELEGATES OF THE AMERICAN MEDICAL ASSOCIATION, CHICAGO, FEBRUARY 15 and 16, 1935

By F. S. CROCKETT, M. D.
LAFAYETTE

Early in February the Board of Trustees sent out a call, through the Speaker of the House of Delegates, Doctor F. C. Warnshuis, for a special meeting of the House of Delegates of the American Medical Association. They were to consider "the social and economic policies of the Association as relating to pending and proposed legislation, to sickness insurance, and to other matters which may be supplied by the Board of Trustees." On the evening of February 14 the delegates began to arrive at the Palmer House in Chicago and, after getting settled in their rooms, they soon gathered in little groups about the lobby. After listening to the opinions expressed by some of the delegates coming from many parts of the country, it was quite evident that considerable doubt existed in the minds of many of them as to the ability of the medical profession to protect itself against the proposed socialization. To some it seemed that it might be wise to get on the band wagon and go along with the parade.

The Indiana delegates arrived in Chicago thoroughly convinced that the profession in our state was unalterably opposed to sickness insurance. It was a bit disheartening to hear the sentiments expressed by the early arrivals Thursday night. The interest of the profession as a whole regarding the dangers affecting them through proposed social legislation was evidenced by the attendance of some 160 out of a possible 175 delegates. The session started off promptly at 10 o'clock Friday morning and there was no planned effort to guide or direct the actions of the House. The procedure was as follows: The Board of Trustees presented each delegate with a small pamphlet of twelve pages, their official statement to the delegates. In this official statement they reviewed the subject of sickness insurance and the action taken by the House of Delegates from time to time. It was shown that in 1916 and 1917 the subject was of sufficient interest to make its first appearance in the House. The history of sickness insurance abroad, beginning in 1883 in Germany and culminating in the British system of 1911, was sketchily reviewed, revealing the study made of these systems and printed in *The Journal of the American Medical Association.*

The development of the present plans for social change was traced from its small beginning during the presidency of Herbert Hoover to the present. The threat of legislation requiring compulsory insurance against sickness did not seem alarming to most of us, even as late as the Cleveland meeting of the American Medical Association last year. The President's interest in greater economic security for the people of the United States was well known, but it was not believed that this included a sympathy for compulsory sickness insurance. Later the President appointed a Committee on Economic Security under the chairmanship of Frances Perkins, Secretary of Labor, and this committee as one of its activities undertook the study of sickness insurance. This complete study was divided into thirteen divisions staffed by technical experts under a technical director for each subdivision. It was especially interesting to learn that the technical expert detailed to direct the study and suggest reforms to medical practice was Edgar Sydenstricker, an employee of the Milbank Fund. A medical advisory board was appointed and later Doctor R. G. Leland and Mr. A. M. Simons of the American Medical Association Bureau of Medical Economics were added to the technical advisory staff. To date it appears that the appointment of the medical advisory board and the addition of technical experts from the American Medical Association was just a bit of window dressing done to give an atmosphere of impartiality to the final report.

The eleven points supplied by the Committee on Economic Security in its report to the President were printed in full so that the delegates might study them in detail. These eleven points offered by the President's committee indicated the main lines along which its studies are proceeding. A brief discussion was also given of the pending Wagner Bill for social insurance, which provides for maternity and child welfare and other activities of an essentially medical character, which would be lodged by this bill for administrative purposes in the Children's Bureau in the Department of Labor, with the exception of that part which belongs to the Bureau of Public Health Service. Some notice was taken of the promotion of sickness insurance schemes in various states. Mention and analysis was made of the so-called Epstein Bill, sponsored by the American Association for Social Security.

Morning and afternoon sessions were devoted to expressions of opinion by delegates from many states widely scattered over the Union. It soon became increasingly apparent that the profession was nowhere ready to yield its position in regard to absolute opposition to all forms of social legislation involving schemes for compulsory sickness insurance. On adjournment at 5 p. m. the Reference Committee went into session to consider the various resolutions and opinions offered during the

day. By midnight the committee had outlined its conclusions to such a degree that a short session the following morning found it ready to present the results of its labor to the House of Delegates at 10:30 a. m. After reviewing numerous suggestions for modifications thought to more properly express the sentiments of those present, the report appended below was unanimously adopted by the House of Delegates later in the afternoon.

REPORT OF THE REFERENCE COMMITTEE SPECIAL SESSION
HOUSE OF DELEGATES
February 15 and 16, 1935

Your Reference Committee, believing that regimentation of the medical profession and lay control of medical practice will be fatal to medical progress and inevitably lower the quality of medical service now available to the American people, condemns unreservedly all propaganda, legislation or political manipulation leading to these ends.

Your Reference Committee has given careful consideration to the record by the Board of Trustees of the previous actions of this House of Delegates concerning sickness insurance and organized medical care and to the account of the measures taken by the Board of Trustees and the officials of the Association to present this point of view to the government and to the people.

The American Medical Association, embracing in its membership some 100,000 of the physicians of the United States, is by far the largest medical organization in this country. The House of Delegates would point out that the American Medical Association is the only medical organization open to all reputable physicians and established on truly democratic principles, and that this House of Delegates, as constituted, is the only body truly representative of the medical profession.

The House of Delegates commends the Board of Trustees and the officers of the Association for their efforts in presenting correctly, maintaining, and promoting the policies and principles heretofore established by this body.

The primary considerations of the physicians constituting the American Medical Association are the welfare of the people, the preservation of their health, and their care in sickness, the advancement of medical science, the improvement of medical care, and the provision of adequate medical service to all the people. These physicians are the only body in the United States qualified by experience and training to guide and suitably control plans for the provision of medical care. The fact that the quality of medical service to the people of the United States today is better than that of any other country in the world is evidence of the extent to which the medical profession has fulfilled its obligations.

The House of Delegates of the American Medical Association reaffirms its opposition to all forms of compulsory sickness insurance whether administered by the federal government, the governments of the individual states or by any individual industry, community, or similar body. It reaffirms, also, its encouragement to local medical organizations to establish plans for the provision of adequate medical service for all of the people, adjusted to present economic conditions, by voluntary budgeting to meet the costs of illness.

The medical profession has given its utmost to the American people, not only in this but in every previous emergency. It has never required compulsion, but has always volunteered its services in anticipation of their need.

The Committee on Economic Security appointed by the President of the United States presented, in a preliminary report to Congress on January 17, eleven principles which that committee considered fundamental to a proposed plan of compulsory health insurance. The House of Delegates is glad to recognize that some of the fundamental considerations for an adequate, reliable, and safe medical service established by the medical profession through years of experience in medical practice are found by the committee to be essential to its own plans.

However, so many inconsistencies and incompatibilities are apparent in the report of the President's Committee on Economic Security thus far presented that many more facts and details are necessary for a proper consideration.

The House of Delegates recognizes the necessity under conditions of emergency for federal aid in meeting basic needs of the indigent; it deprecates, however, any provision whereby federal subsidies for medical services are administered and controlled by a lay bureau. While the desirability of adequate medical service for crippled children and for the preservation of child and maternal health is beyond question, the House of Delegates deplores and protests those sections of the Wagner Bill which place in the Children's Bureau of the Department of Labor the responsibility for the administration of funds for these purposes.

The House of Delegates condemns as pernicious that section of the Wagner Bill which creates a social insurance board without specification of the character of its personnel to administer functions essentially medical in character and demanding technical knowledge not available to those without medical training.

The so-called Epstein Bill proposed by the American Association for Social Security, now being prompted with propaganda in the individual states, is a vicious, deceptive, dangerous, and demoralizing measure. An analysis of this proposed law has been published by the American Medical Association. It introduces such hazardous principles as multiple taxation, inordinate costs, extravagant administration, and an inevitable trend toward social and financial bankruptcy.

The committee has studied this matter from a broad standpoint, considering many plans submit-

ted by the Bureau of Medical Economics as well as those conveyed in resolutions from the floor of the House of Delegates. It reiterates the fact there is no model plan which is a cure-all for the social ills any more than there is a panacea for the physical ills that affect mankind. There are now more than 150 plans for medical service undergoing study and trial in various communities in the United States. Your Bureau of Medical Economics has studied these plans and is now ready and willing to advise medical societies in the creation and operation of such plans. The plans developed by the Bureau of Medical Economics will serve the people of the community in the prevention of disease, the maintenance of health, and with curative care in illness. They must at the same time meet apparent economic factors and protect the public welfare by safeguarding to the medical profession the functions of control of medical standards and the continued advancement of medical educational requirements. They must not destroy that initiative which is vital to the highest type of medical service.

In the establishment of all such plans, county medical societies must be guided by the ten fundamental principles[1] adopted by this House of Delegat the annual session in June, 1934. The House of Delegates would again emphasize particularly the necessity for separate provision for hospital facilities and the physician's services. Payment for medical service, whether by prepayment plans, installment purchase or so-called voluntary hospital insurance plans, must hold, as absolutely distinct, remuneration for hospital care on the one hand and the individual, personal, scientific ministrations of the physicians on the other.

Your Reference Committee suggests that the Board of Trustees request the Bureau of Medical Economics to study further the plans now existing and such as may develop, with special reference to the way in which they meet the needs of their communities, to the costs of operation, to the quality of service rendered, the effects of such service on the medical profession, the applicability to rural, village, urban, and industrial population, and to develop for presentation at the meeting of the American Medical Association in June model skeleton plans adapted to the needs of populations of various types.

Signed:

DR. HARRY H. WILSON, *Chairman*, California.
DR. WARREN F. DRAPER, Virginia.
DR. E. F. CODY, Massachusetts.
DR. E. H. CAREY, Texas.
DR. N. B. VAN ETTEN, New York.
DR. F. S. CROCKETT, Indiana.
DR. W. F. BRAASCH, Minnesota.

[1] These ten principles published on page 307 of the July, 1934, issue of THE JOURNAL in the "Report of the Cleveland Session of the A. M. A."

DIPHTHERIA DEATHS FOR JANUARY 1935

There were eight deaths from diphtheria during the month of January, 1935, this being the lowest number on record for this particular month. The lowest previous number was in 1934 when there were fourteen deaths reported.

Attention is called to the fact that Marion County has three deaths; Allen County, which has had a large amount of diphtheria for the past three years, reported two deaths during January; Lawrence County, which had by far the largest rate for 1934, has started the year with one death. These three counties will be watched with a great deal of interest and concern on the part of the Diphtheria Prevention Committee. Certainly they are getting off to a bad start.

The deaths by counties for the month of January are shown below:

County	No. Deaths January, 1935
Allen	2
Fayette	1
Lawrence	1
Marion	3
Warrick	1
Total	8

THURMAN B. RICE, M. D., *Chairman.*

SECRETARIES' COLUMN

Sorry I missed the Secretaries' Conference, which was the biggest that we have ever had. Registered attendance numbered 125, divided as follows: presidents, 14; secretaries, 37; councilors, 8; guests, 66.

I want to thank all the secretaries for my reelection. I hope that we can have another big meeting next year.

I think it would be nice if every secretary would send in his reaction to Mr. Milbank's talk. We would like to know what *you* think about it.

The report of the Secretaries' Conference, with papers read by secretaries, is printed in this issue under "Society Proceedings" on page 161.

House Bill No. 66 was defeated because of the efforts of the chairman of the Public Health Committee of the House.

How many secretaries have analyzed the vote on this bill? Some of the county medical societies are falling down in their duties in contacting legislators. The thing to do now is to get busy and go after Senate Bill No. 185. This bill is one of the important bills to defeat. Don't put it off—get busy now. Your future depends upon your efforts and work with legislative matters today.

A. M. MITCHELL, M. D.,
Chairman.

IMPORTANT LEGISLATIVE MATTERS

STATE MEDICINE AND CULT LEGISLATION

With the General Assembly entering its last round-up period as THE JOURNAL goes to press, it is reasonable to predict that there will be no state medicine or cult legislation enacted this session, although adjournment does not come until the middle of March, and almost anything can happen these days, in any legislative body, before the Ides of March have come and gone.

EPSTEIN BILL NOT INTRODUCED

The Abraham Epstein bill, sponsored by the American Association for Social Security (has nothing whatever to do with the Federal Committee for Economic Security), has not even put in an appearance during the first month and a half of the session, and even though it were introduced at this late date, it would have little chance of passage.

CHIROPRACTIC BILL

That age-old perennial, the chiropractic separate board bill (HB 66), made its first appearance in the House of Representatives early in the session, was reported out of the House Committee on State Medicine and Public Health on a divided committee report, and it is due to the splendid work of Dr. H. R. Willan, of Martinsville, and Dr. R. C. Stephens, of Plymouth, members of the committee, that it was killed in the House by a vote of 52 to 37. This was a most decisive victory and a splendid vote of confidence in the medical profession by the representatives of the people. Having been so overwhelmingly defeated in the House, the chiropractors shied away hastily from that body, and turned to the Senate. On February fourteenth, a bill similar to the ill-fated House bill was introduced in the Senate by Senators Jesse E. Wade, of Mt. Vernon, and Raymond C. Sohl, of Dyer (Lake County). A most amazing and unusual thing then transpired. Lieutenant-Governor Townsend sent the bill to the Judiciary A Committee instead of the Public Health Committee of the Senate. Senator Wade is chairman of that committee and perhaps it was felt that that committee would be more friendly to the cultists than would the Public Health Committee. But the Senate committee gave the medical profession another vote of confidence by an alignment of six to two in favor of indefinitely postponing the bill. Senator Wade still was holding up reporting this bill out of committee when THE JOURNAL went to press. It is felt that once the bill is reported out, it will be killed forthwith, despite all the oratory that could be mustered in its behalf.

RELIEF FROM FINANCIAL LOSS IN AUTOMOBILE ACCIDENTS

Before the session started, a great deal of preliminary work was done in drafting a measure to relieve hospitals, nurses, and physicians from financial losses sustained in caring for patients injured in automobile accidents. The measure, as originally drawn, was devised so that money for payment in the cases would come from state and county highway funds. The Governor, and every legislator to whom the bill was presented, agreed that there was need of relief, but all objected to the use of highway funds for this purpose. As an alternative plan, the Governor told the committee assigned to look after this question that something to relieve the hospitals, nurses, and physicians might be worked out in conjunction with the general relief problem. He requested figures as to the number of accidents throughout the state and the resulting financial losses to the hospitals and members of the profession. The secretary of each county medical society, and the hospitals throughout the state, have been asked to submit data for each locality and this has been compiled and placed in the hands of the Governor.

OTHER LEGISLATION AFFECTING THE MEDICAL PROFESSION

Several tax bills that would affect the members of the profession from a financial standpoint are under consideration, but at this writing it is impossible to tell just which ones will become the accepted measures. It is generally felt that there is no sentiment for a two per cent retail sales tax measure unless the federal legislation for old-age pensions demands this and the budget cannot be balanced without it. If a retail sales tax is enacted, the proposals call for a reduction to some groups in the gross income tax from one per cent to one-fourth of one per cent, *but not to professional men.* This would be an injustice to doctors, dentists, attorneys, and teachers, and your Legislative Committee is watching the developments along this line closely.

A number of other bills have been introduced, which affect the profession in many ways, and among the most important are the following:

SENATE BILLS

1. S. B. 43: Cuts out price advertising by optometrists. Signed by the Governor. Newspaper reports have intimated that this bill will allow optometrists to invade the medical field. The bill has been carefully checked, and it contains nothing which would enable optometrists to practice medicine, permit them to use cycloplegics in eye examinations, or give them an exclusive right to fit glasses.
2. S. B. 139: Licenses beauticians and sets up health regulations under the control of the State Board of Health. Passed and signed.
3. S. B. 83: Uniform narcotic drug act. Passed Senate.
4. S. B. 118: Extends limit from thirty to sixty days in treatment of compensation cases. This will be of great aid to the physician.

5. S. B. 109: Requires health departments to file reports of births and deaths with county clerks as well as with the State Board of Health. As this would only mean duplication of work, the health committee in the Senate has not passed this bill out.
6. S. B. 130: Poison bill. Restricts sales of certain poisonous drugs to drug stores and professional men. This also provides for proper labeling of lye containers.
7. S. B. 161: Provides for licensing and regulating tourist camps. Passed Senate; in the House.
8. S. B. 223: Provides that hydrophobia treatment shall be given to rabies victims in their homes by local physicians at the expense of the county rather than having the patient brought to Indianapolis and treated at the expense of the state. Up for final passage in Senate.
9. S. B. 233: Provides that all health officers shall be physicians, and this is a permissive act by which local communities may create full-time health officers.
10. S. B. 234: Provides for establishment of a new tuberculosis hospital in southern Indiana.
11. S. B. 275: Enabling act whereby the State of Indiana takes advantage of federal funds offered by the Wagner-Lewis Bill for the care of crippled children, maternal welfare, etc.
12. S. B. 185: Prohibits a hospital from denying immediate members of family of the patient in a private room access thereto at any time. This has been amended to protect the physician. Has not been reported out of committee.

HOUSE BILLS

13. H. B. 82: Provides for the establishment of a tuberculosis hospital in southern Indiana (companion bill to S. B. 234).
14. H. B. 113: Authorizes the State Board of Pharmacy to appoint narcotic inspectors to assist federal inspectors. This is needless and duplicating legislation, and so far has been successfully opposed by your committee.
15. H. B. 211: Authorizes the provision of insulin by local authorities to care for indigent diabetics. Passed House and Senate.
16. H. B. 218: A bill limiting some types of dental advertising. Passed House and up in Senate for action.
17. H. B. 236: A poison bill, providing that labels in red letters bearing the word "Poison" shall be placed on containers. Still in House.
18. H. B. 253: Regulates maternity hospitals. Remains in House.
19. H. B. 387: A lien bill for hospitals and physicians, effective in automobile accident injuries. Repeals 1933 act which gave right to hold junior liens by hospitals.

O. T. SCAMAHORN, M. D.,
Chairman Legislative Committee.

TWENTY-FIVE YEARS AGO

The following items are taken from THE JOURNAL for February and March, 1910:

According to recent reports the Wells County Medical Society has adopted a revised fee bill, and in so doing raised the charge for ordinary visits to $2. Previous to the adoption of the new fee bill the charge for ordinary visits was $1.50.

Upon the efficiency of the secretary depends the life and progress of your county medical society. If the meetings are irregular, poorly attended and the programs uninteresting it is quite probable that you have a secretary who lacks energy, enterprise and enthusiasm. If the meetings of your society are not reported in THE JOURNAL, or the county society directory information in THE JOURNAL is inaccurate, then ask your secretary for an accounting.

In some communities the cost of meat and nearly everything else goes up, but the cost of medical services remains the same or less than twenty years ago. As an instance of the ridiculous cut-throat measures adopted by some so-called physicians to obtain "business" we need only mention a suit brought against some county commissioners by an Ohio doctor to enforce a contract calling for an average of 25 cents per visit, medicine included, for professional (?) services rendered the poor.

The Montgomery County Teachers' Association, in session at Crawfordsville in January, passed a resolution urging the next legislature to give the whole state a compulsory inspection medical law.

National interest has been aroused by the benzoate of soda trial in Indianapolis during the month of January. Some of the leading chemists of the United States have testified before Commissioner Daniels as to the effect of benzoate of soda on the human system. So far no decision has been reached.

Dr. William T. Gott, Crawfordsville, secretary of the State Board of Medical Registration and Examination, announced that reciprocal relations as regarding physicians' licenses have been established between Indiana and New York, subject to the rules and regulations of reciprocity between the medical boards.

THE PRESIDENT'S PAGE

"BUNK"

Through the forceful and enthusiastic efforts and influence of a group of propagandists, a considerable portion of the general public has become estranged from the medical profession. This great group does not work as a unit, but may be divided into various types of offenders, and may be discriminated as follows for the purpose of study:

First, the adroit and clever group, embracing those who have mercenary designs on the public, such as drugless healers, who crack the joints and stretch the imaginations of their victims, following an advanced payment of the fee, depending, of course, upon the prerequisite—ignorance—of their pitifully credulous followers, who have been lured to their dens by fiendish advertising by radio, public press and personal contact. The financial success depends upon one thing, and that is an easily gullible and ignorant public.

Second, are faith healers, who have an inflated ego sufficient to expect that their God will violate His code of natural laws (which are divine laws as sure as there are such things as divine laws), all for their particular benefit, by which they may claim miraculous achievements. But those of us who believe in the Deity and His works have not the courage or desire to ask for a change of management or a recodification of these immutable natural laws. Again, cultism is born in ignorance, and education is the only remedy.

Third, quack doctors and quack remedies have for many generations been an incalculable menace to the public and the medical profession alike, and are today growing in importance. And, is it not a shameful disgrace to our boasted civilization? Ignorance is not so much responsible for the quack doctor or his remedies, but ignorance is responsible for the patronage those doctors receive. Ignorant and gullible people listen anxiously to the radio exploitation of quack remedies and carefully scan the public press for fake cure-alls, all of which have been bought and paid for with easy money. Many large fortunes have been made through the sale of quack remedies, all paid for over the counter in hard cash, while the doctor waits and waits for his. Indeed, the quack and faker depend upon an ignorant and gullible public for their easy profits. Indeed, all of the foregoing "bunk-venders" train their public to their way of thinking, spending much time and money in so doing, while medical men sit supinely by and do not even give public expression to righteous indignation.

Is this attitude alone not enough to indict and convict the medical profession in the eyes of not only our adversaries, but the general public as well? One may say, "just turn the other cheek," but already we have had both cheeks beaten off our faces and that is one reason that a portion of our dear public passes us by unrecognized. Indeed, we have already, in submissive sweetness, allowed our enemies to foist their foibles across our pathway, which leaves us but one alternative, and that is to correct the cause which is born of ignorance. In other words, while we treat patients' bodies, we must also treat their minds.

Now, after a thorough inquisition and an accurate computation of all the "bunk," which has been at our throats, may we not reasonably conclude that the sum total of "bunk" is a greater menace to society in general, and our profession in particular, than is poverty? Please think this over.

If we had begun a quarter of a century ago to teach our public preventive medicine, hygiene and sanitation, with a strong course of "anti-bunk," by this time all of the public, including ambitious social workers and welfare organizations, would be glad to follow and help, instead of lead and direct. Furthermore, there would be less poverty, and the medical profession would have earned and been accorded the high command in the advisory councils of public health and social welfare.

DO YOU KNOW WHAT YOUR ASSOCIATION IS DOING?

Your legislative committee has been working hard to avert the passage of measures that have been introduced into the Indiana legislature and which might be detrimental to the practice of medicine.

Your delegates to the American Medical Association attended the special meeting of the House of Delegates of that body, February fifteenth and sixteenth, and the report from that special meeting is published in this issue. The preliminary report on legislative affairs is published in this issue, too, and if you would know what is being done and what you may expect, read these reports. If further legislative action of interest to your profession occurs during this session of the legislature, a further report will be made in the April JOURNAL.

Read these reports and *know* what your own Association officers and committees are doing in your interests. A more intense interest in these affairs on the part of every member of the Association, years ago, might have made it possible to avoid present uncertainties. That interest is essential now.

W. J. Leach

INDIANA MEDICINE IN RETROSPECT

L. G. Zerfas, M. D., Historian, Indiana State Medical Association

THE INFLUENCE OF TRANSYLVANIA UNIVERSITY

This article is the continuation of a previous one regarding a study of the influence of Transylvania University on medical education in Indiana.

DR. FREDERICK RIDGELY

Dr. Frederick Ridgely was born in Anne Arundel County, Maryland, May 25, 1757, and was one of the most celebrated of the early physicians of the West. He studied medicine in Delaware, and attended medical lectures at the University of Pennsylvania. He served as surgeon in different positions throughout the Revolutionary War. He came to Kentucky in 1790, was surgeon-general in General Anthony Wayne's army in 1794, and, after the decisive campaign of that year, returned to Kentucky in 1799, where he was made professor of materia medica, midwifery, and practice of physic. He, along with Dr. Samuel Brown, constituted the first medical faculty of the Medical Department of Transylvania University. He was the preceptor of Dr. Benjamin Dudley, who later took such a prominent part in the Medical Department of the same institution.

It is doubtful whether, during the years from 1799 to 1817, when Transylvania went through several periods of reorganization, any person from the Territory or State of Indiana attended medical lectures or received a medical degree from that school. Records of attendance prior to the year 1816-1817 not being available, one is left only to conjecture. The faculty in 1817 included the following members:

Dr. Benjamin Dudley—Professor of Anatomy and Surgery.

Dr. James Overton—Professor of Theory and Practice.

Dr. Daniel Drake—Professor of Materia Medica and Medical Botany.

Dr. William H. Richardson—Professor of Obstetrics.

Dr. James Blythe—Professor of Chemistry.

DR. BENJAMIN W. DUDLEY

Dr. Benjamin Winslow Dudley was born in Spottsylvania County, Virginia, April 12, 1785. His father, Ambrose Dudley, moved to Kentucky—in the vicinity of Lexington—when his son Benjamin was about a year old. While still very young Benjamin was placed under the tutelage of Doctor Frederick Ridgely, who enjoyed an extensive practice in Lexington. In 1804 he attended lectures in the Medical Department of Pennsylvania University, then the leading medical center in the United States, and in 1806, just two weeks before he was twenty-one years of age, he received the degree of doctor of medicine from that institution. For a few years following his graduation he practiced medicine in Lexington. In 1810 he set sail down the Ohio River to New Orleans where he purchased a cargo of flour and sailed on a prosperous trip to Gibraltar. After disposing of his cargo he made his way to Paris. He spent four



BENJAMIN WINSLOW DUDLEY
1785-1870

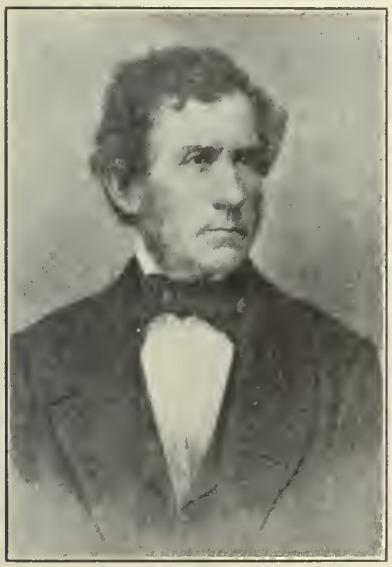
years in all in Europe where he made good use of his time, visiting the hospitals and dissecting rooms and attending lectures by some of the eminent instructors of Paris and London. In 1814 he returned to Lexington where he resumed his duties as professor of surgery and anatomy in the Medical Department of Transylvania University. He relinquished the chair of Anatomy in 1844, but retained the chair of Surgery until 1850. Dr. Robert Peter states that "Doctor Dudley was an earnest and laborious practical man. His whole time and energies were devoted to his profession, in which, like the celebrated John Hunter—the one of his early preceptors Dudley most admired—he sought instruction in the books of nature—in his practice—rather than in the written archives of science. . . . As a teacher and lecturer he was admirably clear and impressive. . . . This, with his great practical skill as a surgeon, his minute and ready knowledge, . . . and his eminent devotedness to his profession, made his students most earnest admirers and followers and aided greatly in the establishment and maintenance of our Medical College."

Doctor Dudley became celebrated because of the success which attended his operation for lithotomy and the use of the roller bandage. He wrote numer-

ous articles, many of which were published in the Transylvania *Journal of Medicine*, a quarterly which appeared in Lexington in February, 1828.

DR. DANIEL DRAKE

Dr. Daniel Drake, another outstanding member of the faculty at this time, may well be considered the Father of Medicine in the West. Those students from Indiana who were so fortunate as to come in contact with him at Transylvania during those early years of his life must have returned to their respective homes fired by his enthusiasm and his genius.



DANIEL DRAKE
1785-1852

Drake was born near Plainfield, New Jersey, October 20, 1785, and moved with his parents to Kentucky in 1788. When he was about fifteen years old he was apprenticed to Dr. William Goforth of Cincinnati, and in the summer of 1805 he was presented with a diploma—the first known to be granted to a student of medicine in the western country. Following this he practiced in Mayslick and Cincinnati until 1815 when he spent a winter in Philadelphia at the end of which time he received the degree of doctor of medicine. Drake was very pleased to accept the professorship of materia medica and botany at Transylvania Medical School in 1817. He went at the invitation of Dr. Benjamin W. Dudley who had succeeded in reorganizing and establishing the medical school on a firm foundation. Drake, zealous, ambitious, and scrupulously conscientious, made an excellent impression as a medical teacher. During the year many differences of opinion arose, particularly between the fiery-tempered Dudley and Drake. In May, 1818, Drake resigned and returned to Cincinnati where he shared an office with Dr. Coleman Rogers. In the same year he founded the Ohio Medical College, the second medical school in the West. He had a bitter controversy, severed his relationship with the Ohio Medical College, and rejoined the medical faculty of Transylvania in the fall of 1823. The faculty at this time was comprised of the most distinguished medical men of the West and was at the height of its glory. The total number of students in attendance was nearly three hundred. He remained until 1827 during which time he became Dean of the faculty and built up a large consultation practice in the South and West. He had become a national figure, universially respected for his great ability and his character. In 1827 he became editor of the *Western Medical and Physical Journal* and his contributions to medical journals were numerous. After leaving Transylvania University he taught at Jefferson Medical College, Philadelphia, and the Medical College of Ohio, founded the Medical Department of Cincinnati College, and taught at the Louisville Medical Institute. His activities will be presented in subsequent articles dealing with the influence of these various schools. In 1850 the first volume of his monumental *Treatise on the Principal Diseases of the Interior Valley of North America* appeared, the fruition of thirty years' work. He died at Cincinnati November 5, 1852, before the second volume was completed. Medicine in Indiana during this period was probably influenced more by him than by any other medical teacher in America.

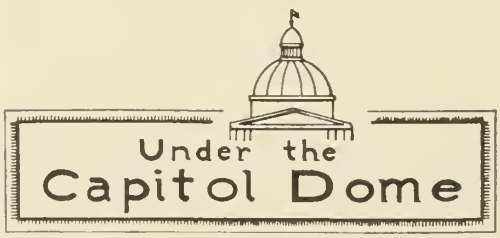
In an advertisement, which appeared in the Indiana Journal of August 21, 1828, it was stated that the medical lectures at Transylvania University would commence as usual on the first Monday of November and terminate on the first Saturday of March. The announcement included the added information: "Each Professor lectures daily, Sabbaths excepted. The ticket to the anatomical and surgical course is $20.00; each of the others $15.00. Matriculation with the use of the library, $5.00. The graduation fee is $20.00."

The requirements for graduation in 1830-1832 were given as follows in the Transylvania *Journal of Medicine:* "Two full courses—one at least in the institution. If the candidate shall have practiced medicine creditably for four years, then only one course of lectures shall be required." The age requirement was twenty-one years, and the candidate was requested to write a thesis and take examinations. These requirements were very much the same as those of the medical departments of the universities of Pennsylvania, Harvard, Yale, Maryland, Virginia, the Medical College of Ohio, Jefferson Medical College, and others.

During the course of years from 1816 to the closing of the Medical Department of Transylvania in 1859, many noted and able teachers were included on the faculty, some of whom had held positions previously in other medical schools. Doctors Cooke, Overton, Richardson, Drake, Rafinesque, Caldwell, Short, Eberle, Mitchell, Yandell, Peter, and Cross constitute a partial list of those who contributed much to the success of the school and

to the training of many of our young men who attended the lectures and demonstrations.

The students from Indiana who attended Transylvania had access to extraordinary library facilities, both general and medical. In 1821, Dr. Charles Caldwell of the Medical Department took with him to Paris $17,000 with which to buy books of a medical nature. In his autobiography he states: "The time of my arrival in Paris was uncommonly and unexpectedly propitious for my purpose. The ravages and wastelayings of the French Revolution had not entirely passed away. Towards the close of that catastrophe the libraries of many wealthy and literary persons had found their way to the shelves of the book seller. . . . I found and purchased at reduced prices no inconsiderable number of the choicest works of the fathers of medicine from Hippocrates to the revival of letters. . . . Hence the decided superiority of the Lexington Medical Library, in those works, to any other in the West and South, and probably in the whole United States." This medical library is at the present time practically intact and is rich in rare volumes of science, law, and literature.



Following is a report of the temporary permits issued to reciprocity applicants, also permanent certificates, for the three-months' period from October 1 to December 31, 1934:

	Date Issued
Temporary Permits—	
DeNaut, James Francis	October 16, 1934
Littig, Amy	November 26, 1934
Faul, Jacob Henry	November 20, 1934
Sneary, Kenneth D.	December 6, 1934
Mino, Victor Hugo	December 28, 1934
Graf, John E.	December 28, 1934
Dobbins, Thomas	December 28, 1934
Permanent Certificates—	
Heck, Martin Casper	October 16, 1934
Barrow, John Hodge	October 16, 1934
Cooney, Charles J.	November 8, 1934
Buikstra, Cyrus R.	November 9, 1934

* * *

PUBLIC HEALTH COSTS

Conservation of the public health in Indiana cost $2,897,853.02 during the fiscal year of 1933, according to the annual statistical report recently completed by Albert E. Dickens, state statistician in the division of accounting and statistics.

This figure includes the disbursements for public health work and operation of health departments and organizations in all governmental units within the state. (It should be borne in mind that the fiscal year of 1933 was only nine months in duration because of a change in beginning of the fiscal year made by the 1933 General Assembly.)

The expenditure for this service represented 1.63 per cent of the total public expenditures during that year.

The total cost of conservation of health was divided among the various units of government as follows: by the state, $294,300.90; by the counties, $1,465,939.82; by civil townships, $7,500; by civil cities, $1,117,703.29, and by civil towns, $12,409.01.

Expenditures by the state were divided as follows:

Board of health	$167,563.84
Pharmacy board	11,325.38
Board of medical registration	3,154.60
Podiatry board	856.41
Board of embalmers	5,312.89
Board of optometry	2,491.02
Nurses' board	7,574.09
Dental board	3,574.44
State Sanitoria	92,448.23
Total for State	$294,300.90

Expenditures by the ninety-two counties were divided as follows:

Health commissioners	$ 119,867.51
County nurses	4,927.28
General hospitals	690,692.21
Other hospitals	650,452.82
Total for counties	$1,465,939.82

Expenditures by civil townships were $7,500, all for hospitals.

Expenditures for civil cities were divided as follows:

Boards of health	$ 498,848.52
Public health nursing	35,754.32
Hospitals and clinics	583,100.45
Total for civil cities	$1,117,703.29

Expenditures for civil towns were $12,409.01, all for health officers.

The amount spent for conservation of health represents 1.63 per cent of the total public expenditures during the year, which were $177,690,993.08.

Sewers and garbage disposal plants, which could be regarded as health expenditures but were not listed as such, cost $1,668,530.80, or .94 per cent of the total expended for government.

The care of the insane and mental defectives cost a total of $1,642,961.92, or .92 per cent of the grand total.

* * *

ANESTHETICS

The right of dentists and doctors of osteopathy to administer anesthetics was upheld by Philip Lutz, Jr., attorney general, in an opinion written for Dr. William R. Davidson, secretary of the State Board of Medical Registration and Examination.

This is the second opinion written recently by the attorney general relative to administering anesthetics. It was the result of confusion among dentists and osteopaths over the effect of the first opinion.

The attorney general's first opinion, written in connection with administering of anesthetics by nurses, held that only a licensed physician could perform this act. It did not take into consideration either the dentists or osteopaths.

The second opinion, quoting Indiana law relative to dentists, said: "Any person shall be said to be practicing dentistry within the meaning of this act . . . who administers dental anesthetics, either general or local, or engages in practices included in the curricula of recognized dental colleges."

Relative to osteopaths, the opinion said: "The holder of such license (for the practicing of obstetrics) when issued shall have the right to practice osteopathy, surgery and obstetrics and to administer anesthetics, antiseptics and narcotics."

"The above statutes should be clear as to the right of both dentists and doctors of osteopathy to administer anesthetics," the opinion said.

"Dentists and doctors of osteopathy each have the right to administer anesthetics as set out by the statutes above quoted," the opinion concluded.

* * *

GROSS INCOME TAX RETURNS

Clarence A. Jackson, director of the state gross income tax division, reports that if collection of gross income tax on annual returns continues at the same rate prevailing on returns tabulated to date, the total revenue will be approximately $4,300,000.

With 117,147 returns tabulated, tax payments totaled $2,064,468, an amount twenty-five per cent greater than that recorded on the same date last year.

The average payment per return was $17.62, compared to $13.54 in 1934. The total collection for the annual period last year was $3,441,000.

* * *

OUTDOOR SANITATION

A program for the promotion of outdoor sanitation is now in operation under the supervision of national, state and local departments of health in cooperation with the Federal Emergency Relief Administration.

Property owners may have an outhouse reconstructed, or a new one built, for the cost of the materials only, providing the locations comply with local ordinances pertaining to distance from sewers and the state specification as to distance from the source of water supply.

Free labor is provided by the FERA. Each unit must pass inspection. The type of structure is recommended by the Federal public health service.

More than 14,000 already have been built in Indiana.

The minimum cost is for pre-cast concrete floor, seat assembly and galvanized pipe. This amounts to about six dollars. Additional lumber necessary may be purchased from any lumber yard or material concern. There is no charge for painting if paint is furnished by the owner, the FERA workers doing this also.

The buildings are not placed within fifty feet of a source of water supply or within twenty-five feet of a stream.

* * *

Dr. J. W. Bowers of Fort Wayne, president of the State Board of Medical Examination and Registration, and Dr. William R. Davidson, of Evansville, secretary, attended the annual Congress of the Federation of Medical Boards of the United States in Chicago, February 18 and 19. Both were speakers.

VOICE OF THE DOCTOR

SOCIAL INSURANCE

February 12, 1935.

To the Editor:

My purpose in addressing THE JOURNAL is to learn something definite concerning social insurance as related to social economics and how it may affect medicine and medical practitioners. Much has been written from the medical man's standpoint, but nothing has been said as to the direct effect upon medicine and how this will work to the doctor's detriment.

The last number of our JOURNAL contains a lengthy discussion from President Leach but contains such an array of accusatory expressions as to fog the whole matter. Just what he means by "There has developed, insidiously, subtly, and adroitly, an American sociology which has become toxic and crippling to our medical body" probably is clear to the good doctor and to many others, but the detailed import of the statement does not appear to me. "The intoxicated public mentality enshrouds the medical profession with a very pernicious and dangerous environment" is equally obscure to a man who habitually calls a spade a "damned shovel" and requires some primary elemental information beyond the brave words of generalities.

Just in what and how are we enshrouded? Who is up to all this contemplated deviltry? What is it we are threatened with? Down here in Newton County, away from the "great medical centers," we have been plugging along, catching colds in the spare bedrooms of the ill, obstetric, "intestinal flus," jerking tonsils for the fun of it, reading all the new stuff concerning coronary occlusion, and doling out the pharmaceutical samples, but we have not caught the stuff that will enshroud us, or evidences of "regiment the profession and price-

list our services." Heavens, Kate, do these enshrouding devils mean to pay us? Tilda of the Gumps shouts, "Soups on," while my poor wife meekly announces, "Come to your turnips, old boy."

It would have been too bad for the medical profession, the hod-carriers union, the small grocer, the dentist and the shoe cobbler had this Federal government in the days of 1904 established a form of social insurance for the misfit, unfit, fit or otherwise, similar to the annuity plans of great insurance companies which are used by competent folks, who would lay away nuts for the winter, rainy day and old age. Indigency would have been regimented and the unfit, through the agency of government, would have been afforded a taste of that he-man quality known so popularly as "rugged individualism." Twenty-five years of laying away nuts for non-employment, old age, sickness and funerals no doubt would have enshrouded the medical profession of the "great medical centers" but we of Newton County possibly could collect from individuals at least fifty per cent of the regular fees.

I have a book on allergy. It seems there must be something of an idiosyncracy among these fellows of the "great medical centers" who throw spasms of fear and overcoming miseries when "the people" speak up in meeting asking for relief from their financial errors. They become enshrouded, toxic, crippled, from subtle influences. They shriek for vigilant antibodies, they look through horoscopes as though laying away nuts for winter were a crime against our profession. They ask, as does the good doctor in his closing lines, that "The wealthy and philanthropically inclined give of their means to the indigent," a sort of dole from the charitably minded that ruins the self-respect of the man on the receiving end and makes the fit unfit for independent citizenry.

The "healing art" was not mothered by "rugged individualism." The untold stories of the sacrifices of men and women for their sick and injured would be couched in softer language than that used by a trades union. The healing art has no Gethsemane. It accepts duty as a privilege, and sacrifice as part of the night's business.

JOHN G. KINNEMAN, M. D.,
Goodland, Ind.

DEATH NOTICES

HERBERT T. WAGNER, M. D., of Indianapolis, died January thirtieth, following an apoplectic stroke suffered two days previously. Dr. Wagner was stricken while performing an operation at the hospital. For many years Dr. Wagner had been a member of the Indianapolis Methodist hospital staff; he was physician for the Shortridge High School Athletic Association and the Indianapolis Girl Scouts at Camp Dellwood. Dr. Wagner was forty-eight years old. He graduated from the Indiana University School of Medicine in 1908, and was a member of the Indianapolis Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

JOHN P. HETHERINGTON, M. D., former Logansport physician, died at his winter home in Miami, Florida, January twenty-sixth, aged sixty-six years. Dr. Hetherington had retired from active practice several years ago.

WALTER K. PRICHARD, M. D., of Cloverdale, died February eighth, aged seventy-four years. Dr. Prichard was a member of the Putnam County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Miami Medical College, Cincinnati, in 1882.

WILLIAM J. BAUER, M. D., of Indianapolis, resident physician at the Methodist hospital, died February eighth, after a long illness. Dr. Bauer was thirty-nine years old. He graduated from the State University of Iowa College of Medicine, Iowa City, in 1933.

HOOSIER NOTES

DR. CARL E. DILLMAN of Louisville, Kentucky, has announced the opening of an office in Corydon.

DR. A. J. ANDERSON of Logansport has moved to New Buffalo where he will conduct a general practice.

DR. LAWRENCE KELSEY of Monterey has leased office rooms in Kewanna where he will conduct a general practice.

DR. AND MRS. EUGENE L. BULSON of Fort Wayne are enjoying a South American cruise, from which they expect to return early in March.

DR. MARGARET BENJAMIN, who has been located in Madison, is now at the Ball Memorial Hospital in Muncie where she will work for a year.

DR. AND MRS. CRAWFORD BAGANZ of Uniondale have gone to New York where Dr. Baganz will take some postgraduate work. He will resume his practice in July.

Dr. Leon Gray has moved his offices from the National sanatorium to the second floor of the Nutter building in Martinsville.

Miss Katherine Dillin, of Washington, Indiana, and Dr. James McElroy, of Indianapolis, were married in Washington, February second.

Dr. F. R. Clapp of South Bend sailed for Europe on the S. S. Bremen, February ninth. Dr. Clapp will do some postgraduate work in Vienna, and expects to return May first.

Dr. Bryce B. Reeve of Whiting has been placed in charge of the Standard Oil Company's medical department of the Standard Oil Company of Indiana. He succeeds the late Dr. Frank R. Morton.

Newspaper reports indicate that through the will of the late Dr. Carl F. Payne of Franklin, an estimated $125,000 endowment for a chair of psychology and philosophy at Franklin College is bequeathed.

Dr. Chester A. Stayton of Indianapolis has been appointed chairman of the Indianapolis and Central Indiana Boy Scout Council, health and safety committee, to succeed the late Dr. John W. Carmack.

Through the will of the late Dr. O. I. Hetsler of Blountsville, a two hundred acre farm in Stony Creek township has been left to the Riley Hospital. The farm will go to Dr. Hetsler's father during his lifetime, after which it will become the property of Indiana University for the benefit of the hospital.

The first meeting of the Indiana State Pediatric Society will be held March 13, 1935, in Indianapolis. The afternoon will be entirely clinical. There will be a dinner meeting at the Columbia Club in the evening. Anyone who is interested in pediatrics is welcome to attend this inaugural meeting.

Members of the Federation of American Societies for Experimental Biology have been advised of an invitation extended by Soviet scientists to attend the Fifteenth International Physiological Congress in Leningrad, August 8, and later in Moscow, where the convention will terminate August 18.

The American Congress of Physical Therapy will hold a one-day session of its mid-western section, in the auditorium of the Service Memorial Institute, Madison, Wisconsin, March 12, 1935. Programs may be obtained from Marion C. Smith, Executive Secretary, 30 North Michigan Avenue, Chicago.

Probably all physicians will be interested in knowing that the sculpticolor, "The Doctor," which was displayed at the Century of Progress Exhibition in Chicago by Petrolagar Laboratories, will be exhibited at the L. S. Ayres and Company store in Indianapolis, March 4 to 23. Read the advertisement on pages xiv and xv in this issue.

The U. S. Civil Service Commission has announced open competitive examinations for dietitians, applications for which positions (chief dietitian, head dietitian, and staff dietitian in the Public Health Service and Veterans' Administration) must be on file with the U. S. Civil Service Commission at Washington not later than March 25, 1935.

The Central District of the Nursing Service Bureau held a communicable disease conference at the Hotel Severin, Indianapolis, January 31 and February 1. Mrs. Nellie S. Parks, assistant professor of nursing education in the Western Reserve School of Nursing, was guest instructor. Lectures on prevention and immunization were presented by physicians.

The Noble County Medical Society has renewed its contract with the trustees of the townships to give medical attention to those on relief for 1935. All medical bills paid by the townships will be discounted one-third in order that all those needing medical attention may receive it and to help the poor fund. Those needing attention are to have their own doctor.

Dr. R. C. Williams, of the U. S. P. H. S. in Washington, D. C., will be the speaker at the banquet meeting of the Theta Kappa Psi medical fraternity, which will be held at the Lincoln Hotel, Indianapolis, March 2. Initiation will occupy the afternoon hours. Alumni are invited and urged to attend. For tickets or other information, address Howard A. Stellner, 346 Limestone Street, Indianapolis.

Lea and Febiger, medical book publishers of Philadelphia, are this year celebrating their one hundred and fiftieth anniversary and have published an interesting booklet entitled "One Hundred and Fifty Years of Publishing," which describes the founding and later achievements of this company. Since 1859 the firm has been the publisher in America of Gray's "Anatomy."

A permanent organization to aid in the care of victims of infantile paralysis in Wayne County will be known as the Wayne County Infantile Paralysis Foundation. The organization was effected January thirty-first, at Richmond, by members of the Roosevelt Birthday Celebration Committee of that community. Temporary officers named did not in-

clude any physicians, although representatives of the medical and other professions will be invited to affiliate with the organization.

THE Seventh International Congress on Industrial Accidents and Diseases will be held at Brussels, Belgium, July 22 to 27, 1935. The American committee of the congress is under the chairmanship of Dr. F. H. Albee, New York, and Dr. E. R. Hayhurst, Columbus, Ohio. Physicians interested in this congress or in the medical tour in conjunction with it may obtain information from the secretary, Dr. Richard Kovacs, 1100 Park Ave., New York.

AT a meeting of the Woman's Auxiliary to the Indianapolis Medical Society, January twenty-fifth, Mrs. D. O. Kearby was made president; Mrs. F. L. Truitt is first vice-president; Mrs. Frank Walker, second vice-president; Mrs. William McBride, third vice-president; Mrs. Walter P. Morton, fourth vice-president; Mrs. Leon G. Zerfas, recording secretary; Mrs. Roy Lee Smith, corresponding secretary; Mrs. Clark E. Day, treasurer; and Mrs. E. May Hahn, historian.

APPLICATIONS for the positions of principal pharmacologist ($5,600 per year), senior pharmacologist ($4,600 per year), pharmacologist ($3,800 per year), associate pharmacologist ($3,200 per year), and assistant pharmacologist ($2,600 per year) will be considered by the United States Civil Service Commission at Washington, D. C., not later than March 11, 1935. Application blanks may be obtained from the U. S. Civil Service Commission at Washington, D. C.

THE American Social Hygiene Association announces miniature editions (8½ x 11 inches) of two exhibits, namely, "The Treatment of Syphilis," and "Gonorrhea in the Male," both shown as part of the scientific exhibits of the American Medical Association at different times. The cost of the former is thirty cents per set, or three dollars per dozen sets; cost of the latter is ten cents per set, eighty cents per dozen sets, all postpaid. The material may be used for teaching purposes or in giving talks to medical societies. The American Social Hygiene Association is located at 50 West 50th Street, New York City.

INDIANA UNIVERSITY SCHOOL OF MEDICINE will offer its tenth annual intensive two-weeks' course in otolaryngology, April 15 to 27, inclusive. The course will consist of complete and minute dissection of the head and neck with practical applications by Dr. John F. Barnhill, and twelve complete mornings of clinical instruction and surgery by Dr. Barnhill and members of the staff in otolaryngology of the medical school. Further information may be obtained by addressing Dr. W. D. Gatch, dean, Indiana University School of Medicine, Indianapolis.

THE Northwest Medical Conference met in St. Paul, Minnesota, February twenty-fourth, for a one-day meeting, with medical economics as the main topic for discussion. The Indiana State Medical Association was represented on the program by Dr. Thurman B. Rice of Indianapolis, who told of the new set-up of the Indiana Division of Public Health; Dr. F. S. Crockett of Lafayette, who discussed national legislation; Dr. R. L. Sensenich of South Bend, who talked about local legislation; and Mr. Thomas Hendricks of Indianapolis, who discussed the subject of postgraduate medical education.

THE Ohio-Michigan-Indiana-Ontario-New York-Pennsylvania sectional meeting of the American College of Surgeons will be held in Cleveland, Ohio, April fourth and fifth, with headquarters at the Hotel Statler. An invitation to attend this meeting is extended not only to the Fellows of the province included, but to the entire medical profession at large. The programs include operative clinics, hospital conferences, medical motion pictures, scientific sessions, and round-table conferences. Further information may be obtained by writing to Dr. G. D. Scott, Sullivan, Indiana, who is secretary of the Indiana Executive Committee of the American College of Surgeons.

WOMAN'S AUXILIARY

THE directors of the Woman's Auxiliary to the Indiana State Medical Association met in the Columbia Club, Indianapolis, February sixth, when reports were given by presidents of the auxiliaries. This was the annual meeting. Those who attended the meeting were Mrs. E. D. Clark, Indianapolis; Mrs. R. L. Compton, Osgood; Mrs. E. O. Nay, Terre Haute; Mrs. M. B. VanCleave, Terre Haute; Mrs. I. N. Trent, Muncie; Mrs. George R. Dillinger, French Lick; Mrs. William S. Tomlin, Mrs. J. H. Eberwein, Mrs. J. T. Wheeler, Mrs. C. F. Neu, Mrs. Charles E. Cottingham, of Indianapolis; Mrs. U. G. Poland, Muncie; Mrs. J. C. Miller, Frankton; Mrs. F. B. Wishard, Anderson.

FEBRUARY was observed as "health month" throughout Indiana by Methodists. The month started the Methodist health crusade which includes a five year program with seven objectives: (1) to give a new interpretation to Christian hospitalization; (2) to secure a new patient support of Christian hospitals; (3) the placing of hospital privileges within the reach of all without pauperizing any; (4) to pledge 500,000 people to make an annual health audit; (5) to provide hospitalization for the mentally sick and incurables; (6) the removal of all indebtedness on properties of Metho-

dist hospitals of the state; (7) to complete the above objectives in five years. The Methodist church in Indiana has hospitals at Princeton, Fort Wayne, Gary, and Indianapolis.

The members of the Bartholomew County Medical Society recently passed this resolution: "We, the members of the Bartholomew County Medical Society, oppose federal health insurance legislation and programs such as are now being considered by the administration and condemn such as being impractical and un-American. We express the belief that they will seriously lower the standards of medical practice and result in inferior service to the public. We are convinced that such experiments have proved failures in Germany, England, etc., and are to be avoided in this country. We request that this resolution be transmitted at once to our federal representatives from Indiana and to adjoining county medical societies." Following this the society sent a message to federal representatives from Indiana as follows:

"RESOLVED THE BARTHOLOMEW COUNTY MEDICAL SOCIETY TWENTY SIX MEN BY RESOLUTION OPPOSE FEDERAL HEALTH INSURANCE LEGISLATION AS IMPRACTICAL AND UNAMERICAN STOP WE EXPECT YOU TO VOTE AGAINST SAME."

The Mid-west Section of the American Laryngological, Rhinological and Otological Society met in Indianapolis, January twenty-third. The program included a memorial service for the late Dr. John W. Carmack of Indianapolis, who was vice-president of the national organization and chairman of the Middle Section. Dr. D. W. Layman of Indianapolis, in charge of the Indianapolis meeting, was appointed to succeed Dr. Carmack. Members of the society were entertained by J. K. Lilly at an informal dinner in Foster Hall. Speakers for the morning scientific session included Drs. Edward King, Cincinnati; Thomas C. Galloway, Evanston, Ill.; E. W. Hagens, Chicago; Joseph C. Beck, Chicago. In the afternoon Dr. Austin A. Hayden, Chicago, discussed "Socialized Medicine Comes to Otolaryngology," and scientific papers were presented by Dr. Lyman Meiks, Indianapolis; Dr. Perry G. Goldsmith, Toronto, Canada; and Dr. Samuel Iglauer, Cincinnati. Visiting members were luncheon guests of the Indianapolis Ophthalmological and Otolaryngological Society, at which time Dr. R. N. Harger, Indianapolis, was the principal speaker.

The annual intensive postgraduate course of the Indiana University School of Medicine will be held this year, May twentieth to June first, inclusive. Details concerning the course will be published in full in the next issue of THE JOURNAL.

INDIANA UNIVERSITY NEWS NOTES

Mrs. Albert J. Beveridge, 4164 Washington Boulevard, Indianapolis, has given the Indiana University medical center library in Indianapolis an engraving of the famous painting, "The Woman with the Dropsy." The painting is by the Dutch master, Gerard Dow, and according to Allan Hendricks, librarian of the medical center, is especially appropriate for the medical school library because of its medical subject. The original painting hangs in the Louvre in Paris with a number of other examples of the work of Gerard Dow.

Other recent gifts to the I. U. medical center library include 25 volumes of medical works from Mrs. William W. Case of Nebraska, Ind., from the library of her late husband and from the library of her husband's father who also was a physician. The W. D. Allison Company of Indianapolis has given a quantity of medical journals of recent publication. This is the third gift of this kind from the Allison company.

Nine Indiana University medical students who will receive the doctor of medicine degree in June have been named internes in the Methodist Hospital, Indianapolis. Their work will begin July 1. Indiana University students receiving appointments with the medical center are: George W. Wagoner, Burrows; Robert W. Currie, Windfall; Glen W. Lee, Indianapolis; Dan E. Talbott, Indianapolis; Chester Lamber, LaPorte; Stanton L. Bryan, Evansville; Lewis C. Robbins, Indianapolis; Joseph Weber, Indianapolis, and Durward Paris, Kokomo.

Three films of a technical nature were shown at the February open meeting of Theta Kappa Psi, professional medical fraternity, at Indiana University. Four hundred medical and pre-medical students attended the meeting. The films were "Normal Delivery," "Plastic Surgery," and "Mediolateral Episiotomy."

Classes for graduate nurses are being conducted this semester by the Indiana University Extension Division in Indianapolis, Fort Wayne, South Bend, East Chicago, Gary, Terre Haute, and Evansville. The work is being offered in co-operation with the I. U. school of education and the State Nurses' Association. The classes cover the following subjects: Principles of Public Health Nursing, Ward Management, Hospital Administration, Advanced Educational Psychology, Principles of Instruction in High School, Secondary Education, Teaching of High School Physiology and Health, and School Health Course of Study Development. The instructors are Miss Virginia A. Jones, Indiana State Board of Health, and Miss Gladys Sellew, St. Vincent's Children's Asylum, Chicago.

BOOK REVIEWS

BOOKS RECEIVED

REPORT ON SEVENTH INTERNATIONAL CONGRESS OF MILITARY MEDICINE AND PHARMACY, Madrid, Spain, May-June, 1933. By William Seaman Bainbridge, Member of the Permanent Committee, Delegate from the United States. 88 pages. Cloth. The Collegiate Press, Menasha, Wisconsin.

* * *

ANNUAL REPORT OF THE SURGEON GENERAL OF THE PUBLIC HEALTH SERVICE OF THE UNITED STATES FOR THE FISCAL YEAR 1934. 143 pages. Cloth. Price 75 cents. For sale by Superintendent of Documents, Washington, D. C.

* * *

HOW TO PRACTICE MEDICINE. By Henry W. Kemp, M. D., New York. Cloth. Price $2.50. 156 pages. Paul B. Hoeber, Inc., New York, 1935.

* * *

OBSERVATIONS OF A GENERAL PRACTITIONER. By William N. Macartney, M. D. 478 pages. Cloth. The Gorham Press, Boston, 1932.

* * *

THE CRIPPLED AND THE DISABLED. The Rehabilitation of the Physically Handicapped in the United States. By Henry H. Kessler. 337 pages. Cloth. Price $4.00. Columbia University Press, New York City, 1935.

* * *

HUMAN ANATOMY. Double Dissection Method. By Dudley J. Morton, Associate Professor of Anatomy, College of Physicians and Surgeons, Columbia University. Two volumes—First Dissection and Second Dissection. 550 pages. Profusely illustrated. Cloth. Price $6.00. Columbia University Press, New York City, 1934.

* * *

STAMMERING AND ALLIED DISORDERS. By C. S. Bluemel, A. M., M. D., F. A. C. P. 182 pages. Cloth. Price $2.00. Macmillan Company, 1935.

* * *

A SYNOPSIS OF MEDICINE. By Henry L. Tidy, M. A., M. D., B. Ch. (Oxon.), physician to St. Thomas' Hospital, consulting physician to the Royal Northern Hospital, London. Sixth edition, revised and enlarged. 1,112 pages. Cloth. Price $6.00. William Wood and Company, Baltimore, 1934.

* * *

MEDICAL CLINICS OF NORTH AMERICA. New York Number, November, 1934. Volume 18, Number 3. 301 pages with 17 illustrations. Per clinic year, July, 1934, to May, 1935, paper, $12.00; cloth, $16.00. W. B. Saunders Company, Philadelphia and London, 1934.

* * *

HUGHES' PRACTICE OF MEDICINE. Revised and edited by Burgess Gordon, M. D., Associate Professor of Medicine, Jefferson Medical College. Section on Nervous and Mental Diseases by Harold D. Palmer, M. D., and Section on Diseases of the Skin by Vaughn C. Garner, M. D. Fifteenth edition, 808 pages, with 61 illustrations. Flexible binding. Price $5.00. P. Blakiston's Son and Company, Philadelphia, 1935.

* * *

ELEMENTARY HUMAN ANATOMY. Based on laboratory studies. By Katharine Sibley, Professor of Physical Education, School of Education, Syracuse University, Syracuse, New York. 380 pages with 213 illustrations. Cloth. Price $4.50. A. S. Barnes and Company, New York, 1935.

HUMAN ANATOMY. Double Dissection Method. By Dudley J. Morton, Assoc. Professor of Anatomy, College of Physicians and Surgeons, Columbia University. Two volumes—first dissection and second dissection. 550 pages. Profusely illustrated. Cloth. Price $6.00. Columbia University Press. New York City, 1934.

The dissection guide, or outline, is organized on a plan which has been in use at the College of Physicians and Surgeons for the past six years. The outstanding features of the plan are the following:

The students work in pairs, four students at the cadaver. The time of each pair of students is divided between work and study. Of a pair of students, during the laboratory period on Monday, one dissects and the other studies the dissection. On Tuesday, the man who has dissected on the preceding day studies while the man who, on the first day has studied, now dissects.

A modification of this plan has been in use for some years as an optional procedure in the Department of Anatomy in the Indiana University School of Medicine. With us, three men have been assigned to do a dissection, two of them dissecting and the third acting as reader and quiz master for the other two. The Columbia procedure would carry this a step farther. The plan as used at Columbia involves a double dissection, the first dissection covering large structures, with a detailed study of viscera and their topographic relations. We might call it a general orientation dissection. The second dissection lays emphasis chiefly on the vascular and nervous system with a review of structures of the first dissection.

At first glance, this would seem to take twice the anatomical material that is ordinarily used. In reality it does not in any way increase the anatomical material necessary, since the students in each dissection are working in pairs.

We have not tried the plan, but inasmuch as the total number of hours involved in the procedure, about 360, is no greater than the total time ordinarily devoted to dissection, it is obvious that the work of each dissection must proceed rapidly, as a consequence of which the drying out of fingers and toes which sometimes occurs, would be a minor problem. All told, we believe the idea well worth a trial, and that it may present at least an interesting variation of present procedure.

The books based upon this plan of dissection are a valuable topical aid, indicating sequence in which subject matter is displayed and studied, with blank pages for brief notes and drawings. The books are not meant in any way to take the place of a textbook of anatomy.

* * *

SOCIETIES AND INSTITUTIONS

THE SECRETARIES' CONFERENCE

The secretaries' conference, held at the Indianapolis Athletic Club, January twenty-seventh, was attended by fourteen presidents of the Indiana State Medical Association, thirty-seven secretaries, eight councilors, and sixty-six guests.

Dr. W. F. Carver, Albion, acted as presiding officer in the absence of Dr. A. M. Mitchell.

Mr. William J. Burns, executive secretary of the Wayne County (Michigan) Medical Society, Detroit, presented his paper, "The Wayne County Medical Society, Detroit, Demonstration." This paper is published in this issue of THE JOURNAL (page 138.) Questions were asked by various secretaries.

Dr. Claude B. Paynter of Salem talked on "Care of the Indigent Sick," and gave, as he said, his impressions as drawn from twenty-nine years of experience in a county no different than thousands of other agricultural communities in this broad land of ours. His paper follows:

DR. PAYNTER'S PAPER

In our community we have localized centers of population, with their continuous and seasonal industries, we have our agriculturalists indulging in all the various activities that temperature and soil permits. We have some who exploit the natural resources without any idea of conservation; we have

the large and small landowners and the more fortunate tenant. We have our miniature slum district, and then we have those people who, like the mistletoe, serve as a leach upon the public and who like to chant the popular present-day phrase, "If it wasn't for the depression." What a vast amount of physical and mental inertia the depression has brought to light! However, be they many or few, the problem that confronts us as medical men is their care while sick.

I want to ask this question: Who has always taken care of them, who is now doing it, and who will continue to do it?

I want to ask another question: If they were not adequately taken care of in the past, and are not now being adequately served, how is it that the span of life has almost doubled in the past decade?

Again I want to ask if it isn't true that every state in the Union recognizes that health of the community and state must be safe-guarded and have established medical boards for the purpose of maintaing high standards of medical service for all of its citizens?

And, again, I want to ask if the profession has so failed in its services to all the people that there should come into existence organizations or laws that would cheat even the most dependent of the intimate and most successful professional relationship that has always been a standard of high achievement?

Pardon my language, but I'd like to know where in the h—— all this hullaballoo about a lack of professional care to the indigent started, and what is the motive back of it all?

I haven't really heard of any solution for the relief of this class of people and the Lord knows the middle class and their more fortunate brothers in the upper brackets even in these times have been taking care of themselves pretty well. You know I get sorta "het up" when I think of an organization now formed or to be formed whose sole business will be to grab part of the earnings of any group now formed or to be formed or which would in any way interefere with the physical well-being of my neighbors or friends.

I think we might divide medical history for convenience, into two parts, so far as our own country is concerned: first, that before the depression, and, second, that since the depression began.

Since my county is a fair average, and since I have been closely associated with the medical history of it, having been secretary since 1912 with the exception of two years, I am going to use it as an example for comparative purposes only.

We have a population of some seventeen thousand scattered over an area of nine hundred square miles. The population has remained constant for many years, and until the past few years, when we have been trying to absorb a roving population from the south, our aspirations have been much the same. In its early history there were as many as thirty-five physicians living and existing within its boundaries at one time. They were content with the simple life, but all were students of their profession. They were in the game because of the love of it. Their old secretary book shows papers written on many subjects. In the book as it came to me was a little printed pamphlet. The information it contained was the result of study and observation by all these pioneers, and, strange as it may seem, it was on the ability of the population to pay. Their scale of fees was graduated to the patient's ability to pay, but in that list was a group of names, the family names being still familiar in my county, who were classed as indigents, and these indigents were cared for by the physician in the community from which he drew his pay patients.

As means of transportation became improved and as physicians became fewer it seemed that that same arrangement held good by mutual understanding. The income from those who could pay protected the physician against loss from those who could not. It was our pride that all should be cared for. From the period of the war until about 1929, the physician's income was such that he not only kept on an even keel but was able to lay away a nest egg for his old age and the care and education of his children. The crash came; he carried on; the savings in money and bonds became accounts unpaid; and then came the inevitable inventory. Our society met, and after much discussion we decided that since for many years we had carried the medical burden and since we were all in the red, it was time to transfer the responsibility of medical care of those whom we deemed should be public charges to the community where it should always have been, still maintaining a fair share of the burden to be given the worthy poor. We gathered our facts and discovered that the eight physicians of our society (all these were in the county), had given over a quarter of a million dollars in service to those in our community unable to pay in the past twenty years. We revised our schedule of fees and decided that in all indigent cases where we felt the community should help bear the burden, a discount of twenty per cent would be made to the taxing unit involved.

We asked for a meeting with the trustees and county commissioners. We presented our problems and facts. They agreed to cooperate and while we had to wait as long as six months, this agreement was maintained and the burden equitably borne by the townships involved. We found that the community as a whole, the taxpayers' association excepted, were sympathetic to our plan. But along about 1933, the county, representing a total population of seventeen thousand, after two years was rather amazed at the burden which eight men had been carrying and decided that they should do something about it. They decided it was all right for eight men to do the job but it was an imposition on seventeen thousand! If you became ill, it was your hard luck. If you died—well, it was just another funeral. The county, which for many years you had supported, never asked that you come into the world, and but few would grieve at your departure. They would half feed and clothe you but if you fell ill that was not a community responsibility. The physicians bore down and maintained the basis of their agreement.

Then we were notified that the Federal government had decided to help bear a local burden and would pay half the expense. Two or three months soon cured them, because the medical expenditures were all out of proportion to the other relief required, and because it did not come within about seven per cent of the total relief they too were ready to back up. No consideration was given that the people here managed to raise much of their sustenance and that the Red Cross, our active relief agency, was furnishing fifty per cent of the clothing. Their figures must not be disturbed. So by chiseling the counties where medical aid was one of the largest items of relief, the Government has managed to maintain their seven per cent ratio and feel that it is doing a grand job. Figuratively speaking, it is. The grocery man gets his in full, the clothing man gets his, the druggist gets his, but the physician gets his *providing* it is within seven per cent of the total. There being hundreds of counties in the United States similar to our own, this percentage would be materially increased if the Federal government treated all alike—my county's figures.

Disbursements for Medical Aid in Washington County for 1934

Total Amount disbursed for *All Relief* from local Funds $17,250.46

Total Amount disbursed for *All Relief* from Federal Funds 4,762.18

Total cost of Poor Relief in 1934..... $22,012.64

Amount of local funds disbursed for hospitalization is $598.65, which is 3.47 per cent of all local funds disbursed for relief.

No Federal funds were disbursed for hospitalization in this county.

Total medical aid is $7,074.62, which is 32.1 per cent of all funds disbursed for poor relief, both Federal and local.

I certify that the above data are true and correct.

R. R. TRASH,
Auditor Washington County.

The whole story of indigent care is based upon who is responsible for it. The Federal government should concern itself only as the health of the nation or large sections of it might be menaced through a spread from local conditions, and then only in the matter of sanitation and prophylaxis. The state through its recognized agency, the State Board of Health, should have no other concern than that of proving itself as a clearing house, first, confining itself to sanitation; second, to prophylaxis; and, third making itself of material assistance to

the medical profession in the matter of quarantine and health education.

The local community should care for its local citizens, providing those things that would make for peace, happiness, and health, each equally bearing the burden through equitable taxation that they might share their just proportion of community obligation.

This problem is one of caring for the indigent sick, those unfortunates who either through physical misfortune or age are unable to maintain an adequate income to meet all the requirements necessary to existence, and so far as I know this class is not now considered even by those enthusiasts who are, because of this social wave of enthusiasm for the security and uplift of humanity, contemplating a radical departure of our present social structure. The rest of humanity, those who are wealthy and those of earning capacity, can care for themselves.

In meeting this menace of socialized medicine, the medical profession is the only one competent to handle its solution and the general practitioner who is broadminded enough to approach the subject from all angles should lead in the solution of this problem, always keeping in mind that the health and welfare of all the people is our ultimate objective.

Following Dr. Paynter, Dr. E. H. Brubaker, of Flora, spoke on "Programs for the Average-Size Medical Society."

DR. BRUBAKER'S PAPER

To prepare a program that will be helpful and worth while for the average county medical society takes time, energy and thought. There are several things directly or indirectly that have a tendency to help make a good program. To meet the first of these requirements it is necessary always to have a good, practical, interesting, instructive, beneficial and scientific program. This is possible in every county society. Programs which deal with post graduate courses should be a part of the routine in order that more intense interest may be created.

To my mind, a society that is composed of general practitioners should be somewhat different than one where there are members who are doing specialty work. How often have you attended a medical society meeting when the address of the evening was ultra-hypothetical, even above your head, and most of all left you absolutely nothing that you could use in your daily practice? We often have heard the remark made, "I am not going to attend the meeting tonight for the reason that the subject does not interest me."

One of the best methods to kill your county society is to have a few meetings and disappoint your members with an inadequate, worthless program. The members will become disgusted and feel that their time is more valuable at home and the time of your next meeting will find many of them at home. The real fundamental duty of the county medical society is to make every member a better practicing physician.

Some doctors have become so accustomed to their own rut that they don't care as they honestly announce. But show them, by giving them a definite responsible task, and their interest will be renewed. Surely somewhere along the line there are subjects that would be of interest to them. The program will have to be of such a nature that it will have a tendency to appeal or it will not be a success and this has a tendency to discourage society attendance.

I can see no advantage and surely nothing is gained if a society should have as noted a man as Dr. Crile to address a group of general practitioners and go into minute details of the technique of thyroid surgery. I am of the opinion that it would be far more profitable if the address were directed along the line of describing the symptoms of acute and chronic goiter or the method used in examining the patient's thyroid gland to see if there is any enlargement where there are no visible signs. We had that demonstrated by the speaker of the evening using the doctors and their wives as patients, and to the surprise of two of the doctors it was discovered that they had enlarged thyroid glands that were slightly toxic. In your opinion which one of the programs was most beneficial to the general practitioner? Which one could he use daily in his practice and would be most profitable to his patients?

I am not posing as a perfect secretary, but, as I have served in that capacity for several years, my plan is to cover every branch of medicine that will help the general practitioner to become a better physician. We should aim to make our program of such a nature that it would make any man in the practice of medicine feel that if for any reason he deprives himself of the privilege of participating in the work of his county medical society, he not only cripples himself but fails to that extent in his duty to the public.

As we have no specialists in our medical society I plan our program to cover subjects that will be most beneficial and instructive to our group. I believe that the program should be planned a year in advance and the entire program printed on cards presented to every member of the society.

I believe things other than scientific programs are needed. We can have subjects that deal with the business end of medicine, the social and investment side, also political, if you please. Why does our county society let us go on and foolishly waste our money in this way? Plenty of capable men can give us judicious advice on this subject.

The speakers who are on the program should be selected with care as to manner of delivery, talent and teaching ability. Unless they are able to put across their ideas to you and you will use said method in your practice, there has been nothing accomplished.

Our program is preceded with a dinner. The doctors' wives are invited to attend our meetings. I am of the opinion that a dinner indirectly helps to make a good program.

The use of all foreign doctors will not be the best for a good program. It is a good plan to have some member of your society placed on the program to discuss the speaker's subject.

It is my candid opinion that the most important business of a medical society is that of selecting a real secretary; one who has the welfare of his society at heart and is willing to spend time and energy in formulating a good program. After all, he is the workhorse of the society. It might be well to ask the members of your society if they have any particular subject that they would like to have presented before the society, for no one man has all of the brilliant ideas. I believe that we can have a better interest in our society if we at least extend to the members an opportunity to offer suggestions. Or you might select two or three other members of your society, have them to meet with the secretary and together make out the program; then next year select others for the same purpose. In this manner it would not be a one man program. Again I believe that in order to have a good program there must be unity. "Behold how good and pleasant it is for brethren to dwell together in unity." In such an atmosphere you have harmony and cooperation among the members of a society. I am not offering any suggestions as to how this might be done. The idea is to benefit every member of your society scientifically, socially, politically, and economically. I am not particularly bragging on our society, but neither am I ashamed of it. We believe that we have a real medical society. A visiting doctor that was on our program made the remark that he had often heard of the Carroll County Medical Society and in the short time that he had been with us he had never in all of his life seen so much handshaking, friendship, and good feeling expressed among its members and wondered how it was done.

I will give you an idea as to the kind of program that we had in our society for the year of 1934.

1st. Bedside diagnosis of cardiac diseases.
2nd. Differential diagnosis of some chest diseases.
3rd. Common skin diseases in adult life.
4th. Somatic reactions to psychiatry.
5th. Childhood anemias.
6th. Acute disorders in the abdomen.
7th. Cancer of cervix, prevention and treatment.
8th. Symptoms of acute and chronic goiter.
9th. Practical treatment of the patient with pneumonia.

SUMMARY

1. It takes time, energy and thought to prepare a program.
2. One of the most important things for the county society to do, therefore, is to use discretion in the selection of its secretary.
3. Choose subjects that are interesting, instructive, and beneficial to the members of the society.

4. Cooperation and unity among the members of the society are essential.
5. Select doctors for your programs who have talent and teaching ability.
6. Make programs a year in advance.

Dr. Oliver J. Fay, chairman of the Board of Trustees of the Iowa State Medical Society, read his paper on "Essentials of Medical Progress," which is published in full in the department devoted to original articles in this issue of THE JOURNAL. (Page 129.)

Dr. O. M. Graves, of Princeton, presented his paper on "The Relationship of the Medical Society to Social Workers and Nurses."

DR. GRAVES' PAPER

The County Medical Society (being the unit of organized medicine), is by right of its membership the logical group to deal with health problems of the community, together with whatever trained help and assistance is necessary to carry out the program. I feel that it is necessary that the practitioner of medicine should have assistance in the nature of nurses to carry out the orders given for the sick and injured, and for the comfort of the patient; also, it is necessary, more especially during these times of reconstruction, with the New Deal methods of caring for the indigent sick, that we have all the information possible upon the patients' home surroundings, financial status, willingness or unwillingness to work, and help to improve their morale and health.

I will here refer only to graduate nurses who are licensed to practice the art in this state, and also with those Social Service workers who have had an adequate training to intelligently carry on with their part of the program.

The nurses in any county, including its cities, should at all times receive their program of work from the County Medical Society, in order that they may do the work that is most needed and most beneficial to that particular community, and in order that the entire unit of relief and service may be coordinated and simplified.

Social Service workers should also be guided by the general principles laid down by the County Medical Society, and this cooperation can be of considerable aid to the general plan of caring for the health of a community, especially as it is related to the indigent relief.

Since the County Medical Society is the unit, both in organized medicine and in the caring for the sickness and health of the community, it is at once apparent that there is much in the way of leadership and detailed planning left to the County Society to perform. The general program of the care of the health of a community is thus up to the individual doctors who make up the County Society. Should any one of the three groups—doctors, nurses, or Social Service workers—fail to do their work, the doctors and the local Medical Society will receive the blame, and rightly so, because they are the ones upon whose shoulders rests the responsibility of the entire plan.

The nurse on private duty will not receive much consideration in this paper, because it is taken for granted that she must do her duty both to the doctor and the patient in an intelligent and ethical manner, or she will not long remain on the case.

We will here discuss more particularly the nurses and Social Service workers who are engaged in work of a more public or community nature, viz.: Those connected with the public schools, tuberculosis societies, county work and New Deal relief agencies, as recently set up in most counties in this and other states.

There is much need today for graduate nurses who are willing to go from house to house and administer the necessary care and advice to families who have sickness in the home, and who are able to pay a small amount for frequent short visits, but who are unable to employ a full-time nurse. These visits could easily be arranged for by the family physician in charge of the case, and the medical society, to the mutual advantage of the patient, nurse, and doctor in certain selected cases that are best known to the doctor. In my opinion, this is the most needed and most neglected phase of the care of the sick today. Almost any indigent case today can call the proper authorities, and receive medical care; and the doctor will do all he can in the short time allotted to that particular case, but he does not have the time to instruct them in the daily baths, fresh air, sanitation, preventive measures, and even details in carrying out the treatment. How many times have we physicians gone into a home to see a patient who has a high fever, severe pain, profuse sweating, severe cough, with the temperature in the room 80 or more degrees Fahrenheit, no fresh air, the patient filthy for lack of a bath, and the room full of neighbors and relatives?

A part-time nurse, paid in part by the patient, or entirely by the relief organizations, could call at this home for 30 minutes a day, for a few days, and be of inestimable value in assisting the doctor and patient, as well as upholding the principles of the medical profession.

Many patients become interested in, and wander away to the various cults, such as the chiropractors, osteopaths, drug store medication, etc., because they are not given enough attention by the family physician. These cases could be held within the medical profession to a large extent, by an intelligent nurse and her contact with the doctor and patient.

The New Deal, with its local relief set-up, may be with us in some form much longer than we expect today. Thus, it must be reckoned with. The principle of the State and A. M. A., in conjunction with the County Society, should act as a group and not as individuals in this vast problem of caring for the indigent sick. The medical men, acting as an organized group, can secure what they decide is best for them and for society, if they will only act as a closely united group, and not as individuals in making their wants known.

In 1934, there were approximately 4,630 licensed nurses in Indiana, who were graduates of the 28 accredited nurses' training schools in this state, or of similar schools in other states. Of this number, 626 additional graduate nurses were issued certificates in 1934, but these were not all graduates of Indiana training schools.[1]

In 1931, there were 505 nurses admitted to accredited training schools in Indiana, and this same class graduated 475 of this number in 1934.

In 1920, there was one trained graduate nurse to every 1,059 people in Indiana, while in 1930, there was one to every 575 people, or an increase of 103 per cent of trained nurses.

In Indiana in 1934, the ratio of public health nurses to the general population was one nurse to 6,750 people.

The ratio of public health nurses to the city population was one to 4,451. The ratio of public health nurses to the rural population was one to 14,598, or about 3½ times as many nurses per population in the cities as in the country, which is too great a difference in the city and rural population.[2]

A definition of public health nursing: "Public health nursing is an organized community service, rendered by graduate nurses to the individuals, family, and community. This service includes the interpretation of medical, sanitary, and social procedures for the correction of defects, prevention of diseases, and the promotion of health, and may include skilled care of the sick in their homes."[3]

The general objectives of all public health nursing services are:

1. To assist in educating individuals and families to protect their own health.
2. To assist in the adjustment of family and social conditions that affect health.
3. To assist in correlating all health and social programs for the welfare of the family and community.
4. To assist in educating the community to develop adequate public health facilities.
5. To cooperate with the County Medical Society in the planning and carrying out of its work.
6. To uphold the ethics of the nursing and medical professions.

In Indiana, one rural family out of fifteen is on relief. One urban family out of twenty is on relief in towns one to five thousand population. One rural family out of six is on relief in towns of one thousand and under. One urban family out of six is on relief in towns over five thousand.

---

[1] Mary T. Walsh, R. N., Educational Director Indiana State Board of Medical Examination and Registration.

[2] Annual Report of the Bureau of Public Health Nursing—July 1, 1933, to July 1, 1934, Eva F. MacDougal, Director.

[3] Reprint from Public Health Nursing, September, 1931.

Thus the greatest burden is in communities of under one thousand and over five thousand population.

In the United States, seven per cent of the rural population is on relief. Eighteen per cent of the families on relief in Indiana carry life insurance for an average amount of $128.00.[4]

In the near future all nurses will receive their training in accredited nurses' training schools that are connected directly with some university, so that the training is of high quality, and where the student nurse is taught the necessary technique in the care of the sick in much less than three years' time, and they will work only eight hours per day. This will mean a much better trained nurse, and only the better trained nurses will be able to finish the work.[5]

(a) There are one hundred and fifty-six Federal Emergency Relief nurses in Indiana. There are none employed on state relief. All nurses on FERA assignments are graduate nurses. Their duties are varied. They make visits in the homes of indigent families where there is illness, at the request of social workers or township trustees. They visit prenatal cases that are referred to them. They assist local physicians in immunization campaigns. They visit the schools, teaching health fundamentals and examining the school children. When a physical defect is noted in a child, the parents are notified and asked to take him to their family physician. For all counties where there are FERA nurses, their standing orders are approved by the local medical association.[6]

(b) There are five hundred and fifty social workers on the FERA work, or about five for each county in Indiana. Their duties are to receive applications for relief and to investigate the needs of each family, make a decision concerning the kind of relief needed and make it possible for the applicant to receive this relief. Help in the securing of special care of the sick cases and to adjust the social relations of members of the families are also in their line of duty.

(c) The requirements for a FERA social worker are: They must be a college graduate, must have a reasonable amount of studies in Economics and Sociology, and should have had some experience. Estimating the average salary and expenses of each of the five hundred and fifty FERA Social Service workers in the state at $100.00 per month, the total expense would be $55,000.00 per month, or $660,000.00 per year, which approximates three-fourths of a million dollars spent in Indiana per year for this service.[7]

(d) Estimating the average salary and expenses of each of the one hundred and fifty-six graduate nurses on FERA work in Indiana to be $100.00 per month, the total expense would be $15,600.00 per month, or $187,200.00 per year.

Of each relief dollar spent in Indiana, 24.8 per cent goes to direct relief, and of the remainder—50 per cent goes to work relief, 5.4 per cent to administration, 3.9 per cent for special programs, and 15 per cent for materials.[8]

In my judgment, there is a disproportionately large amount of money spent for Social Service workers, in comparison to the actual service rendered by them. In the majority of the counties in the state, the township trustees and other locally active relief workers who have lived in the county for many years, and who previously had charge of local relief, can adequately do the work of the Social Service worker at practically no expense. There is need for Social Service workers in the larger cities of, say 15,000 or more population, where the trustees do not know the majority of those applying for relief.

I do not believe that we have a very high percentage of Social Service people working on FERA who come up to the previously stated high standards, and who have had the proper amount of experience to qualify them for making recommendations upon which charity is dispensed.

If the figures were reversed, and we had five hundred and fifty nurses and one hundred and fifty-six Social Service workers, and the nurses were sent to the homes of sick indigents for one-half to one hour, calls as necessary, there is no doubt but that much more good could be accomplished.

The nurse must be taught and constantly supervised by the doctors and the medical society to see that she maintains the ethics of both the nursing and medical professions, or she may do irreparable damage before her actions are stopped. Again I want to repeat that a tactful visiting nurse can do much to educate the people in that community not to patronize the chiropractors and other cults, and thus be of inestimable value to the community and to the medical profession. In many cases the Social Service worker is not properly educated and trained sufficiently to get beneath the superficial investigations, and they are out-smarted by the professional indigent case, and what actually happens is that the indigent becomes more indigent, and he ceases to expect to have to work for a living again as long as he can get the bare necessities of life without work. What is needed most today is more nurses doing part-time nursing in many homes, fewer Social Service workers, more equitable pay for the doctors doing work for the indigents, and more of the relief dollar going to the persons needing relief, rather than to so many white-collared political relief dispensers.

* * *

Dr. J. L. Allen, of Greenfield, then read his paper on "Cooperation of Doctors and Dentists in County Society Organization Work."

DR. ALLEN'S PAPER

The professions of medicine and dentistry are more intimately related and more closely allied than any of the others. Their purposes, objectives, ideals and ethics are practically the same. The subject which they study is the human body. They both endeavor to find the laws governing its development and growth, its anatomy, and functions of its various organs, the preservation of health and the prevention and cure of disease. The human body is their field, their world, and all else is subservient to it. By applying the knowledge gained in this study they are able to give to humanity information that makes for the betterment of the human race in its development, its advancement and for the alleviation of pain and distress. They endeavor to make life worth the living.

Since the two professions are so closely related and intimately associated it is only to be supposed that in the earlier days of their development and existence they should have a common beginning. This is indeed the history of them and in the earlier days physicians were the dentists and did the work now performed by dentists. In fact there was but the one profession. It is only within the past century that there came the division into the two professions.

From historical references it is known that in the earlier days there was much more unity existing between the two professions than now exists in many places. However, much more unity has existed between the two state organizations than does exist in many counties.

"At the present time the Medical Society has a committee on publicity—a committee that puts editorials and articles in the newspapers. Dr. Wishard is chairman of this committee. The dentists have a similar committee known as the health council of the Indiana Society. These two committees work together and divide the releases."

Since the above was written I have information from Dr. Wishard, Dr. Henshaw and Mr. Hendricks that each organization is carrying on its own publicity programs.

In the county society organization work there could be much said in favor of the cooperation of the doctors and dentists. Their interests are much the same. Dentists may be looked upon as those who have made a special study of the teeth, their care and treatment, and their relation to the general health of the human body. In a way they are the same as other specialists, as the operative surgeon, the obstetrician, dermatologist, neurologist or those more closely allied specialists of the eye, ear, nose and throat.

[4] Indiana Division of Public Health Bulletin, November, 1934, page 173. E. H. Scheidler, Indiana Director of Rural Rehabilitation.

[5] Indiana Division of Public Health Bulletin, November 1934, page 173. Report Indiana State Nurses' Meeting at Ft. Wayne, October 2-4, 1934.

[6] Letter from Wayne Coy, Director Governor's Commission on Unemployment Relief, December 31, 1934.

[7] Supervisor FERA, Princeton, Indiana.

[8] Supervisor FERA, Princeton, Indiana, FERA Bulletin.

The physician in general practice has perhaps more occasions and need of consulting with or referring his patients to the dentist than to anyone of the other specialists.

So in the County Society there should be the closest cooperation between the members of both professions. There should be unity and provision made for the dentists to be at least affiliative members of the county organization.

In our county every practicing physician and dentist is a member of the County Medical Society. We have one retired physician, who is a life honorary member, eighteen physicians and eight dentists, all members. It is a 100 per cent county. The dentists pay the regular dues that are collected from each member each year. They have two meetings each year in which they give the program. Our attendance is good and we all feel that we are benefited by the cooperation.

Dr. W. N. Wishard, in a letter to me dated January 21, 1935, stated the summary of all so well that I am taking the liberty of quoting him in closing:

"Obviously close cooperation, mutual understanding and high ethical ideals are essential in the professions of medicine and dentistry, and a sympathetic understanding of the intimate relation of the two professions and their mutual ethical ideals and their educational purposes should be encouraged."

* * *

Dr. Walter L. Bierring, president of the American Medical Association, talked briefly on "Plans for Economic Security," tracing the organization of the Committee for Economic Security, sketching the provisions of the Wagner bill, and telling of the vigilance of the officials of the American Medical Association in efforts to combat detrimental projects as well as to cooperate with government officials in efforts to protect the interests of the physician, and he assured the audience that the medical part of the Committee on Economic Security (the Medical Advisory Committee) would stand up for organized medicine.

Dr. E. M. Shanklin of Hammond was replaced on the program by Mr. Hendricks, who called attention to the fact that THE JOURNAL needs the support of every physician in the Association, and asked the secretaries to call the matter of JOURNAL advertising to the attention of county society members.

DR. MILLER'S PAPER

Dr. S. T. Miller of Elkhart talked about "Public Health Educational Work by the County Medical Society," as follows:

The public in general and the parent-teacher associations in particular are more eager at the present time than ever before to know more about medicine and health problems, and it is the duty of the county medical societies to supply and disseminate this knowledge.

In the past it was the public health nurse who examined the school children, made the diagnosis and prescribed the treatment to the doctor. All that was left for the doctor to do was to use the rubber stamp "Yes" or start a row. Many of these complaints could really be laid at the door of the doctors of the county, because of the "hands off" attitude of the society, and on the other hand to the determined spirit of some social workers that people are entitled to know and a nurse is the one to tell the news.

I well recall when our infant welfare work started about fifteen years ago, and then a little later the Red Cross service. Almost every doctor in the town "saw red" except one or two who, in a measure, sponsored the projects. Had they not been men of high standing they probably would have been expelled from our local society. At the present time I rarely hear any criticism in our town of either service and there is undoubtedly a better understanding between the services. However, I feel that many times the medical society (at least our local society) is not doing what it should in the way of cooperation. For example, only a few weeks ago the Red Cross nurse telephoned and said they had a number of children whose tonsils should come out. "Will you operate three?" Of course, my answer was in the affirative. They brought in the children and I will admit that they needed the operation, *but* did we go over them as we do our private patients? No! We did the work and then went hurriedly on to our regular business.

Of course much of our public health educational work is carried to the lower classes of people who are poor and many of them ignorant, and a great deal of this effort is wasted, because of lack of intelligence. However, missionary work of all kinds is time-consuming and expensive, and yet in these days of enlightenment it is necessary to carry on. There are many organizations such as parent-teacher associations, Rotary, Lions, Kiwanis, and other service clubs, etc., that would be delighted to give a program over to the medical society. Church brotherhoods and church women's societies and other local clubs frequently have difficulty in filling their programs. There are many general health topics that can be discussed in an interesting way to a good audience. And it has been my experience that folks in these clubs turn out well to hear a physician speak, for in the minds of many folks there is still a lot of mysticism to medicine and they like to hear about it. If the physicians even wanted to be mercenary (which they do not) I think the dissemination of health knowledge would bring business to their offices. For instance, the local radio, the cancer talks, through sponsoring of the periodic general examination and other programs, has undoubtedly helped the medical profession. There are more people now than ever before coming to the doctor's office for information and check-ups and general examination, and incidentally they are the intelligent folks who can and are willing to pay for that service.

I know it is a difficult problem to get a medical society interested and organized so as to be of real service to the community as well as to be of benefit to the profession, but we have a goodly number of very well educated young men who should be interested and who have the time. They, together with the older men whose jealousies should be laid upon the shelf and who should direct the work, should get back of a conservative, well-balanced program and give the public more health knowledge than they have now. The public health nurse, the county tuberculosis nurse, the school nurse, the infant welfare and Red Cross workers, and workers in other health services should work hand in hand with the medical society, and I know these folks would welcome the chance for closer cooperation.

What has our local society, for instance, been doing? Last year, for one thing, we put on a campaign for smallpox vaccination and diphtheria immunization, as most of you in the state did. Some of our members gave health talks to parent-teacher associations; a few talks were given for the benefit of the Red Cross in their tuberculosis seal sales before Christmas; we have one member who gives two hours a day for two days each week to the Child Welfare Association. Our Red Cross has one day a month for a tuberculosis clinic.

Incidentally, how many of you know just what the Child Welfare or Red Cross in your city is trying to do? I will admit that before I saw my name on this program, I only knew in a very general way what they were doing, but upon investigating I found out several things. I found that at our welfare station most of the babies come from the lower strata of life, FERA workers or those who are on the dole. Our infant welfare has an agreement with our city society that no one shall be eligible for registration if they have a weekly income for a family of three or four of $20.00, increasing $5.00 per week for each additional dependent. Nurses shall not make calls outside of a radius of one mile from the city limits. The nurse may weigh a baby and give advice as to clothing if requested, but no feeding instructions shall be given. This is left to the directing physician. The nurse, who is a very competent woman, tells me that they see twice as many babies as they did in 1932, in spite of the restrictions put upon them by the medical society at that time. Sick children are not cared for and the bringing of them to the clinic is discouraged, but they are sent to the physician of their choice.

As to the Red Cross, the school nurses, three in number in our town, are a part of the Red Cross service. They inspect children for skin rashes, skin diseases, malnutrition, enlarged tonsils, mouth breathing and decayed teeth. In the spring they have a round-up of children five and one-half years of age and have members of the society examine them before they enter school. They give dental clinics twice a week, which are conducted by our local dental society. The Red Cross nurse

visits all known tuberculosis cases and instructs them in a general way as to hygiene. They give pre-natal care to the indigent, assist the doctor at confinements and in minor surgery in homes or offices as requested. They do general medical and surgical nursing except for communicable diseases. In our city they receive their income from two insurance companies with whom they have contracts for nursing service to policyholders, from an appropriation made by the school board, and some revenue from the sale of tuberculosis seals. They receive part pay from patients and the deficit is made up through the Community Chest. In normal times they received from the insurance companies 50 per cent; from pay patients, 25 per cent; free service, 25 per cent; but at the present time the figures are: insurance companies, 40 per cent; pay patients, 10 per cent; free service, 50 per cent.

In conclusion, may I ask what the county medical society is going to do relative to the question of birth control? Even the ministers talk about it in their conferences. Shall the doctors wash their hands and say, "We will have nothing to do with the question," or shall they try intelligently to instruct young folks on the subject? Is it better for them to hear from lay organization the "clap-trap" stuff that is noised around, and patronize the druggist for advice and material, or go to a doctor who will insert gold pesseries? Fifty to sixty per cent of the births in 1933 were to folks of the indigent class and to those in the lower brackets of life. I have not the courage to try to tell you what should be done, but I feel that this certainly comes under the heading of "What is or what is not the public entitled to know from the physician?"

These organizations are here to stay. Since many of us felt several years ago that we were handed a lemon, perhaps the best advice after all is to take it, add sugar and make good lemonade; in other words, make of this situation something useful and profitable, both to the public and to the medical profession. The sooner we realize that in the problem of enlightening the general public, the more intelligent cooperation that can exist between us and these various agencies, the more constructive and useful will be our public health educational work.

* * *

Dean W. D. Gatch of the Indiana University School of Medicine made the following comments about the "Indiana Plan":

The Indiana Plan is based upon the idea that any public health movement must have the hearty approval of the medical profession if it is to succeed. The medical profession is the only group which possesses the knowledge which will make a public health movement of social value. It is as ridiculous to allow laymen to plan and conduct a health program as it would be to employ physicians to construct a great building or a bridge.

Under the Indiana Plan all education of the public in matters pertaining to public health is in the hands of the organized medical profession. If the organized profession of a county refuses to conduct such educational work, then none will be done.

Now, with this power there goes a commensurate responsibility. If the medical profession fails to give the education in health matters which the public needs and demands, then the plan will fail, the monopoly of this service will be taken from the doctors and divided among various groups of social workers, and a powerful engine for the socialization of medicine will be developed.

The Indiana Plan has the advantage of forcing the doctors to study health and community problems. Unless they will do this there is grave danger that changes in medical practice disastrous to the profession and doubly disastrous to the public will be brought about. If socialized medicine ever comes, it will come because of the lethargy and incomplete organization of the physicians. The public health set-up in Indiana puts the profession in a strategic position to mould public opinion in medical affairs.

The chief argument against the socialization of medicine is not what it will do to the medical profession, but what it will do to the public. It, on last analysis, means the fastening upon the public of the most odious and un-American form of slavery wherein the individual will be forced to entrust his health, life, and his most intimate personal history to a physician whom he may not know or whom he personally fears or dislikes. The cure of any inadequate medical service which may exist is not socialization of medicine, but the improvement of the economic status of the worker. The wishes of the public will ultimately settle this question. The agitation for changes in medical practice is not being made by the rank and file of the population, but by certain special groups interested in bringing it about.

Under the Indiana Plan each county society is expected to devise and carry out a systematic course of instruction to the public on health topics. It is best for the members of the county societies to do this themselves whenever possible, but if it is not possible, the Indiana Division of Public Health can supply the necessary assistance.

This is a new experiment in public health work. It lays upon the organized profession a responsibility which is new and very great. But I have sufficient faith in the intelligence and public spirit of the doctors of the state to predict its success.

* * *

Election of a chairman of secretaries for 1935 resulted in the unanimous re-election of Dr. A. M. Mitchell of Terre Haute.

The meeting adjourned until 5:45, when dinner was served, following which Mr. Albert G. Milbank, president of the Milbank Memorial Fund, presented his address, which was printed as an insert in the February issue of THE JOURNAL.

* * *

Dr. Walter Bierring of Des Moines made a few follow-up comments, pleading for time to try out various programs before drastic changes of any kind are made.

INDIANA STATE MEDICAL ASSOCIATION

BUREAU OF PUBLICITY

December 28, 1934.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D.; J. H. Stygall, M. D.; and T. A. Hendricks, executive secretary.

Release, "Common Sense and the Common Cold," approved for publication in Monday papers, January 7.

First draft of release on "Eye Examinations" brought to the attention of the Bureau and the Bureau suggested that this be forwarded to several eye men for a re-check.

The Bureau suggested that a release be prepared upon "Vitamins."

The Bureau approved a preliminary release to be given to the newspapers previous to the secretaries' conference on Sunday, January 27.

Letters in regard to questionable newspaper articles prepared and approved by the Bureau. The secretary was instructed to forward these to the secretary of the society in whose locality these articles appeared.

Newspaper clippings reviewed by the Bureau.

* * *

January 4, 1935.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D.; J. H. Stygall, M. D., and T. A. Hendricks, executive secretary.

Release on secretaries' conference approved for publication in Monday morning papers, January 21.

Letter received correcting the release upon "Eye Examinations."

Request for speaker:

January 9—Lowell School, Hawthorne Road and Raymond Street, Indianapolis. Request for pediatrician. Speaker obtained.

Letter received from the director of the Bureau of Health and Public Instruction of the American Medical Association acknowledging letter of December 29 from the Bureau. An excerpt from this letter follows:

> "There is a feeling in the Advisory Committee for the Summer Round-Up that examinations should be paid for wherever possible and I think we will be able to get a concrete declaration to this effect into the instructions for 1936."

The Bureau of Publicity took special cognizance of the article which appeared in the January issue of THE JOURNAL of the Indiana State Medical Association concerning colds.

Request received from the executive secretary of the Indiana State Nurses' Association to be placed upon the mailing list to receive articles of the Bureau of Publicity approved by the Bureau.

* * *

January 11, 1935.

Meeting called to order at 3:30 p. m.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D.; J. H. Stygall, M. D.; and T. A. Hendricks, executive secretary.

Release, "Debunking the Vitamins," read and approved for publication in Monday papers, January 28, 1935.

The release on "Eye Examinations" was held up temporarily by the Bureau.

Report on medical meeting:

January 9—Lowell School, Parent-Teacher Association, Indianapolis. "Your Child's Health." Seventy-five to eighty present.

Request for speaker:

February 12—Putnam County Medical Society, Greencastle, Ind. Speaker on "Sickness Insurance" desired.

Letter asking for recent article of the Bureau of Publicity upon "Common Sense and the Common Cold" brought to the attention of the Bureau, and the secretary was instructed to comply with the request.

The article, "Little Things That Cause Big Accidents," in the *Indiana Parent-Teacher* for January, brought to the attention and approved by the Bureau.

INDIANA DIVISION OF PUBLIC HEALTH

BUREAU OF VITAL STATISTICS

INDIANA VITAL STATISTICS—1934

The Indiana Division of Public Health calls attention to the fact that the vital statistics for the year just past serve warning upon the public that the battle against disease is by no means won. The general death rate for the year 1934 is the highest that it has been since 1929. Letters from other states of the central west indicate that exactly the same condition is showing itself in their figures. Estimates presented by the Surgeon General of the United States Public Health Service for the first half of the year indicate that the trend is essentially the same over the entire United States.

Attention is called to the increase in organic heart disease, though a considerable portion of this increase is due to a change in classification of the causes of death. Other degenerative diseases, such as apoplexy, Bright's disease, diabetes, and cancer, are up.

There has been a slight increase in the death of infants under one year of age. In explanation of this may be mentioned as possible causes the unusually hot summer of 1934 and the high incidence of measles for that year.

Bright spots in the figures for 1934 are to be found in the fact that tuberculosis and diphtheria both show the lowest rates ever obtained, and that birth rates are again turning upward. Last year was the first year there has been a gain in birth rates since 1924.

VITAL STATISTICS

STATE OF INDIANA	1934	1933	1932	1931	1930	1929	1928	1927	1926	1925	1924	1923
Total Births	52,335	50,500	53,073	55,975	59,280	58,828	60,294	62,251	62,785	64,300	67,380	65,104
Rate per 1,000 Population	15.9	15.4	16.2	17.2	18.3	18.4	19.1	20.4	20.6	21.5	22.4	22.2
Total Deaths	40,538	38,032	38,795	38,710	39,207	40,981	40,507	37,655	40,150	38,596	37,035	38,760
Rate per1,000 Population	12.3	11.6	11.8	11.9	12.1	12.8	12.8	12.4	13.2	12.7	12.3	13.2
Infant Deaths	2,955	2,675	2,900	3,214	3,404	3,749	3,760	3,662	4,535	4,354	4,429	4,630
Per 1,000 Births	56.4	52.9	54.6	57.4	57.4	63.6	62.4	59.0	72.3	67.7	65.6	71.2
Maternal Death Rate	5.3	5.4	4.9	5.6	5.5	6.8	6.0	6.4	6.5	5.7	5.4	6.0
IMPORTANT CAUSES—												
Tuberculosis	1,788	1,863	1,964	1,980	2,136	2,331	2,314	2,297	2,555	2,498	2,520	2,779
Typhoid Fever	104	95	86	98	107	118	146	157	204	246	214	207
Diphtheria	120	148	172	137	137	158	182	227	180	170	242	420
Scarlet Fever	121	86	88	119	72	106	73	80	95	103	71	86
Measles	225	13	17	156	62	125	65	61	374	59	175	258
Whooping Cough	189	70	182	146	101	181	140	185	387	171	295	261
Pneumonia	2,831	2,263	2,869	2,797	2,818	3,284	3,398	2,571	3,423	3,064	3,021	3,523
Diarrhoea (Under 2 Years)	407	369	394	453	614	563	589	561	827	953	780	854
Cerebro Spinal Fever	21	49	129	183	271	89	14	13	8	17	13	13
Poliomyelitis	22	11	8	19	26	11	20	45	20	28	16	25
Influenza	743	1,020	1,443	1,141	684	1,974	1,953	840	1,567	1,354	705	1,700
Puerperal Septicemia	57	60	58	85	95	106	109	117	140	135	154	186
Total Puerperal Causes	280	277	264	315	330	405	363	400	409	370	364	392
Cancer	3,813	3,594	3,626	3,448	3,399	3,370	3,349	3,352	3,228	3,048	2,930	2,956
Total External Causes	3,938	3,585	3,277	3,660	3,522	3,390	3,312	3,223	2,965	3,155	3,012	2,917
Homicidal	229	183	217	210	213	213	211	192	171	197	219	185
Suicidal	605	689	646	668	649	524	539	487	434	443	406	428
Accidental (Total)	3,104	2,713	2,414	2,782	2,660	2,653	2,562	2,544	2,360	2,515	2,387	2,304
By Automobiles	1,227	1,103	989	1,192	1,146	1,054	962	861	697	644	534	533
Smallpox	1	1	2	8	18	14	13	15	8	5	8	4
Syphilis	230	239	218	185	203	185	240	215	243	247	259	234
Diabetes	617	499	532	555	521	490	519	478	464	445	439	516
Bright's Disease	2,552	2,496	2,399	2,461	2,606	2,519	2,585	2,580	2,681	2,481	2,568	2,460
Organic Heart Disease	8,983	6,077	6,102	5,728	6,160	6,208	5,779	5,517	5,274	4,949	4,791	4,749
Apoplexy	4,191	3,629	3,738	3,610	3,621	3,632	3,649	3,245	3,413	3,265	3,249	3,162
Alcoholism	134	121	94	116	130	143	136	120	99	82	97	65
Malaria	19	24	7	7	14	14	16	8	13	8	12	19
Tetanus	28	32	31	29	45	41	23	33	39	35	43	43
Hydrophobia	2	1	4	4	1	5	8	2	2	0	0	1
DEATH RATE PER 100,000 POPULATION—												
Tuberculosis	54 2	56 9	59 9	61 1	65 9	72 8	73 4	75 6	84 0	82 2	84 0	94 7
Typhoid Fever	3 1	2 9	2 6	2 9	3 3	3 7	4 6	5 1	6 7	8 1	7 1	7 0
Diphtheria	3 6	4 5	5 2	4 1	4 1	4 8	5 7	7 5	5 9	5 6	8 1	14 3
Scarlet Fever	3 6	2 7	2 7	3 6	2 1	3 2	2 4	2 6	3 2	3 4	2 3	2 9
Puerperal Causes	8 4	8 4	8 1	9 6	10 1	12 6	11 5	13 1	13 4	12 3	11 8	13 0
Cancer	114 8	109 7	110 8	106 1	104 6	105 3	106 2	110 3	106 3	100 3	97 6	100 7
Heart Disease	271 2	185 8	183 2	176 8	190 0	194 0	183 4	181 6	173 6	162 9	159 5	174 4
Apoplexy	127 2	110 8	114 1	111 2	111 6	113 5	115 7	106 8	112 2	107 5	108 2	106 1
Bright's Disease	77 4	76 1	73 2	74 8	80 4	78 7	82 0	84 8	88 1	81 5	95 1	94 9
Alcoholism	4 0	3 6	2 9	3 5	3 9	4 4	4 2	4 0	3 3	2 7	3 2	2 2
Infant Diarrhoea	12 2	11 1	12 3	13 9	18 9	14 1	18 8	18 4	27 2	31 3	25 9	29 0
Pneumonia	85 9	69 1	90 6	86 2	86 9	102 6	107 7	84 5	112 5	100 8	100 7	120 1
Influenza	22 5	31 1	44 0	35 0	21 0	61 5	61 9	27 6	51 5	44 6	23 1	62 9

INDIANA DIVISION OF PUBLIC HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report, December, 1934

	Dec. 1934	Nov. 1934	Oct. 1934	Dec. 1933	Dec. 1932
Tuberculosis	211	112	154	101	179
Chickenpox	663	438	134	741	691
Measles	875	414	188	248	81
Scarlet fever	949	731	428	870	571
Smallpox	9	12	4	15	29
Typhoid fever	19	31	43	13	23
Whooping cough	197	264	181	199	78
Diphtheria	202	277	256	191	388
Influenza	189	134	78	187	5,118
Pneumonia	75	29	14	42	162
Mumps	12	14	1	38	62
Poliomyelitis	10	5	7	3	0
Meningitis	2	1	3	7	14
Encephalitis	2	5	7	2	1

Monthly Report, January, 1935

Diseases	Jan. 1935	Dec. 1934	Nov. 1934	Jan. 1934	Jan. 1933
Tuberculosis	84	211	112	167	162
Chickenpox	529	663	438	907	386
Measles	1,744	975	414	1,432	53
Scarlet fever	793	949	731	998	511
Smallpox	10	9	12	14	12
Typhoid fever	12	19	31	6	10
Whooping cough	174	197	264	182	117
Diphtheria	202	202	277	191	226
Influenza	687	199	134	329	2,413
Pneumonia	109	75	29	83	126
Mumps	32	12	14	131	145
Poliomyelitis	0	10	5	1	1
Meningitis	5	2	1	10	18
Trachoma	1	0	0	6	1
Encephalitis	3	2	5	0	0

COUNTY SOCIETY REPORTS

ADAMS COUNTY MEDICAL SOCIETY members met at Decatur, in the Adams County Memorial Hospital, January eleventh, when Dr. A. N. Ferguson of Fort Wayne presented a paper on "Nervous Indigestion." Dr. H. O. Jones of Berne presented a paper before the society at its meeting February fifteenth.

* * *

ALLEN COUNTY MEDICAL SOCIETY members met in the Chamber of Commerce, Fort Wayne, January twenty-ninth. Dr. R. L. Sensenich of South Bend discussed "Sickness Insurance." Seventy-four members and eight guests attended. Societies in the entire district were advised of this meeting and urged to attend. Representatives from the local dental society and from the hospitals were present.

At the February fifth meeting Dr. Irving W. Potter of Buffalo, N. Y., discussed "Elective Version and Extraction." Fifty-four members and fifteen guests were present for this dinner meeting. Nurses on the obstetrical service of the local hospitals were invited to attend.

The February nineteenth meeting was held at St. Joseph Hospital, in charge of the staff members.

* * *

BOONE COUNTY MEDICAL SOCIETY held its annual meeting at the Ulen Country Club, Lebanon, February fifth.

Officers for 1935 were elected as follows:

President, Robert S. Ball, Lebanon.

Vice-President, John D. Coons, Lebanon.

Secretary-Treasurer, E. A. Rainey, Lebanon.

Three new members were welcomed into the society: Dr. Elmer D. Johns, Lebanon; Dr. O. E. Brendel, Zionsville; and Dr. Frank Riley, Jamestown.

* * *

CASS COUNTY MEDICAL SOCIETY members met at Logansport, January eighteenth, to hear Dr. Clyde Culbertson, Indianapolis, talk on "Clinical Diagnosis as an Aid to Physicians." Attendance numbered thirty.

CLINTON COUNTY MEDICAL SOCIETY held its regular monthly meeting at the Coulter Hotel, Frankfort, February seventh. Papers were presented by Dr. C. A. Burroughs on "Indication for and Use of Forceps," and Dr. T. A. Dykhuizen on "Bladder Symptoms in the Female Due to Urethral Stricture." The regular meeting of this society scheduled for March seventh will not be held, and all members are urged to attend the joint meeting with the Carroll County Medical Society at Flora, March fourteenth.

* * *

DAVIESS-MARTIN COUNTY MEDICAL SOCIETY members met, January twenty-ninth, for a discussion of fee schedules. A committee of five was appointed to prepare an up-to-date fee schedule for presentation at the next meeting.

* * *

DEARBORN-OHIO COUNTY MEDICAL SOCIETY met January seventeenth in Aurora for a dinner meeting. The January thirty-first meeting was held at Lawrenceburg. A discussion of fee schedules formed the program for the evening. This society will maintain standard fee schedules for all indigents without reduction. Unanimous opposition to health insurance was expressed.

* * *

DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY members held a meeting at the Roberts Hotel, Muncie, January fifteenth, to hear the Rev. O. G. Myers who presented the plan of the Methodist Hospital group to familiarize the laity with hospital responsibility. Twenty-five attended the meeting. Officers for 1935 were elected.

* * *

ELKHART COUNTY MEDICAL SOCIETY members held their regular monthly meeting in Elkhart, February seventh. Dr. Goethe Link of Indianapolis was the principal speaker.

* * *

ELWOOD MEDICAL SOCIETY and Elwood Dental Society met February eighteenth, with Dr. Chester A. Stayton of Indianapolis as principal speaker. His subject was "The Practical Value of the X-Ray Examination in Diagnosis."

* * *

FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY members met at the McFarlan Hotel, January eighth, to hear Dr. Ernest Rupel of Indianapolis discuss "Infections of the Urinary Tract," and Dr. Mathew Winters of Indianapolis talked on "Infectious Diseases of Childhood." Attendance numbered thirteen.

* * *

FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY met at Hillsboro, February seventh. "Cancer in General Practice" was the subject discussed by Drs. George A. Collett and Wemple Dodds of Crawfordsville. Eighteen members attended.

* * *

GIBSON COUNTY MEDICAL SOCIETY held its monthly meeting at Princeton, February eleventh, with Dr. S. W. Schneck of Mt. Carmel, Illinois, as principal speaker. His subject was "Modern Classification of Kidney Diseases."

At the January fourteenth meeting of the Gibson County society, Dr. A. M. Mitchell of Terre Haute discussed "Health Insurance and Social Medicine."

* * *

GRANT COUNTY MEDICAL SOCIETY members met at the Spencer Hotel, Marion, January twenty-ninth, with an attendance of thirty-five. Dr. G. J. Garceau of Indianapolis talked on "Backache."

* * *

GREENE COUNTY MEDICAL SOCIETY members met at the Freeman Greene County Hospital, Linton, January seventeenth, with Dr. M. S. Mount of Bloomfield as the speaker. Dr. Mount's subject was "Eclampsia."

The members of the Greene County Medical Society met at the Linton, Indiana, Freeman-Greene County Hospital, February fourteenth. Dr. George Moses of Worthington talked on "Headaches—Their Classification, Causes, and Treatment."

HANCOCK COUNTY MEDICAL SOCIETY met at the Columbia Hotel, Greenfield, January twenty-first, with Dr. Harry E. Kitterman of Indianapolis as principal speaker. Dr. Kitterman's subject was "Common Fractures and Their Treatment." Attendance numbered fourteen.

This society met at the Columbia Hotel, Greenfield, February eighteenth, with the program in charge of Dr. Mary L. Bruner, the society's honorary life member. Dr. Cecil Andrews presented a paper on "Sojourn in Guam." Dr. Andrews is home on a furlough after a two-years' experience in the medical department of the United States Navy, most of which time was spent in Guam.

* * *

HENDRICKS COUNTY MEDICAL SOCIETY members met at Crawley's Hall, Danville, January twenty-fifth, to hear Dr. A. F. Weyerbacher of Indianapolis present a paper on "Urinary Antiseptics." Dr. James Balch of Indianapolis presented an illustrated talk.

* * *

HENRY COUNTY MEDICAL SOCIETY met at the Henry County Hospital, Newcastle, January seventeenth, to hear Dr. Roy D. Arn of Dayton discuss "The Management of Fractures of the Skull and Intra-Cranial Damage." Attendance numbered twenty.

* * *

HOWARD COUNTY MEDICAL SOCIETY members met at Kokomo, February first, when Drs. James I. Banash and F. K. Hick of Chicago presented papers. Their subjects concerned oxygen therapy.

* * *

INDIANAPOLIS MEDICAL SOCIETY met at the Athenaeum, January twenty-second, when a symposium on Nervous and Mental Diseases was presented, with Drs. C. P. Emerson, Max Bahr, and Larue Carter as speakers.

At the January twenty-ninth meeting, Dr. Norman M. Keith of the Mayo Clinic conducted a clinic in the afternoon, and in the evening presented a paper on "Types of Renal Disease and Their Clinical Significance."

The regular meeting held February fifth was held in the City Hospital auditorium, and was a joint meeting with the staff of the hospital.

The Indianapolis Medical Society and the Indianapolis Dental Society held a dinner meeting at the Columbia Club, February eleventh. Speakers were Mr. Albert Stump, attorney for the Indiana State Medical Association, and Dr. Norman Denner of Cleveland, Ohio. Attendance numbered approximately two hundred, with several present from Muncie, Richmond, and Terre Haute.

The February twelfth meeting, held in the Athenaeum, was addressed by Drs. E. M. Amos, C. J. McIntyre, James S. McBride, William A. McBride, and J. H. Stygall, who presented a symposium on Tuberculosis.

* * *

JEFFERSON COUNTY MEDICAL SOCIETY met at Madison, January twenty-eighth, to hear Dr. William King of Indianapolis discuss "Age Periods and Heart Disease." This was a dinner meeting, held at the Hillside Hotel. Attendance numbered twelve.

* * *

JAY COUNTY MEDICAL SOCIETY met January fourth at the Portland Country Club to hear Dr. H. G. Hamer of Indianapolis discuss "The Essentials of Urinary Diagnosis."

* * *

LAKE COUNTY MEDICAL SOCIETY met at Mercy Hospital, Gary, January tenth, to hear Dr. Eric Oldberg of Chicago talk on "The Treatment of Head Injuries."

At the February fourteenth meeting, held in St. Margaret's Hospital, Hammond, Dr. Clifford J. Barborka of Chicago was the principal speaker, his subject being "Diet and Disease."

LAPORTE COUNTY MEDICAL SOCIETY met at LaPorte, January seventeenth, to hear Dr. Robert Berghoff of Chicago discuss "Common Types of Heart Disease." Attendance numbered nineteen.

* * *

LAWRENCE COUNTY MEDICAL SOCIETY met at the Greystone Hotel, Bedford, February seventh, with Dr. F. D. Martin as principal speaker.

* * *

MADISON COUNTY MEDICAL SOCIETY members heard Dr. John R. Thrasher of Indianapolis when their meeting was held at St. John's Hospital, Anderson, January twenty-first. Dr. Thrasher, whose subject was venereal diseases, took the place of Dr. Paul O'Leary of the Mayo Clinic, who was scheduled to speak but was unable to reach Anderson because of snow storms.

The members of the Madison County Medical Society met at St. John's Hospital, February eighteenth, to hear Dr. J. C. Drake present a paper. In his announcement of this meeting, Dr. Austin, the secretary, calls attention to the fact that twenty-five members of the society are still delinquent.

* * *

MONTGOMERY COUNTY MEDICAL SOCIETY met at Culver Hospital, January seventeenth, for a dinner meeting. The scheduled speaker was unable to attend, and a business meeting was held, during which a uniform fee basis for the county, in caring for township cases, was worked out.

* * *

MUNCIE ACADEMY OF MEDICINE meetings were held January twenty-ninth, February fifth, and February twelfth; Dr. Louis Hermann of Cincinnati, Dr. William H. Walsh of Chicago, and Dr. Hugh Cabot of Rochester, Minnesota, were speakers for the respective meetings.

* * *

NORTHEASTERN INDIANA ACADEMY OF MEDICINE met at the Gawthrop Hotel, Kendallville, February twenty-first, for a dinner meeting. Speakers were: John W. Thompson, M. D., of Garrett, whose subject was "Rupture of the Liver," and A. J. Sparks, M. D., of Fort Wayne, who talked about "Transurethral Prostatectomy."

* * *

PARKE-VERMILLION COUNTY MEDICAL SOCIETY met January sixteenth, to hear Drs. O. O. Alexander and A. M. Mitchell of Terre Haute discuss "Relief Pay" and "Medical Legislation." This was a dinner meeting.

* * *

RANDOLPH COUNTY MEDICAL SOCIETY members met at the Randolph County Hospital, Winchester, January fourteenth. Dr. C. E. Martin of Lynn, newly elected president of the society, presented his president's address.

* * *

RIPLEY COUNTY MEDICAL SOCIETY met at Osgood, February thirteenth, for a discussion of the indigent care and a program for handling it. Another meeting was held February twentieth for the same purpose.

* * *

SHELBY COUNTY MEDICAL SOCIETY members met at the Strand Alcazar, February sixth, for a dinner and business meeting. Twenty-one attended the meeting.

* * *

ST. JOSEPH COUNTY MEDICAL SOCIETY met at South Bend in the Indiana Club rooms, January fifteenth, for installation of officers. Forty-seven attendants were entertained by Philip Foxwell, magician.

On January twenty-second, Dr. R. B. Acker of South Bend discussed "Malignancies of the Bones," and Dr. R. L. Sensenich called to the attention of the society those bills affect-

PROFESSIONAL PROTECTION

SINCE 1899
SPECIALIZED
SERVICE

A DOCTOR SAYS:—

"The satisfaction and sense of security which I had under your protection with a damage suit staring me in the face cannot be appreciated by other doctors until they 'have been on the spot.' "

THE
MEDICAL PROTECTIVE COMPANY
OF FORT WAYNE, INDIANA
WHEATON, ILLINOIS

Trademark Registered STORM Trademark Registered

Binder and Abdominal Supporter



Gives perfect uplift. Is worn with comfort and satisfaction. Made of Cotton, Linen or Silk. Washable as underwear. Three distinct types, many variations of each.

The Picture Shows "Type N"

Storm belts adaptable to all conditions, Ptosis Hernia, Pregnancy, Obesity, Sacro-Iliac Relaxations, High and Low Operations, etc.

Ask for Literature

KATHERINE L. STORM, M. D.
Originator, Owner and Maker
1701 Diamond St. Philadelphia

ing medical practice which were then before Congress and the Indiana legislature.

The January twenty-ninth meeting was held in the Jefferson Plaza, and Dr. L. M. Jones, superintendent of Epworth Hospital, discussed "Use of Leisure Hours." Thirty-nine members and three guests were present.

The February eleventh meeting was held in the Jefferson Plaza. Dr. P. J. Birmingham of South Bend talked on "Fractures of the Extremities." Thirty-seven members were present.

* * *

STEUBEN COUNTY MEDICAL SOCIETY members met at the Hotel Hendry, January twenty-fifth, for a discussion of "Care of the Indigent." The Board of County Commissioners and the township trustees were invited to attend the meeting.

* * *

TIPPECANOE COUNTY MEDICAL SOCIETY met February fourteenth, at Lincoln Lodge, Lafayette, for a dinner meeting. A clinic was held at St. Elizabeth Hospital at four in the afternoon, and in the evening Dr. C. O. McCormick of Indianapolis talked on 'The Problem of Maternal Mortality."

* * *

TIPTON COUNTY MEDICAL SOCIETY members and members of the Tipton County Dental Society met January twenty-first at the Elks Home, Tipton. Dr. Edward Stahl of Lafayette presented a paper on "Fractures."

* * *

VIGO COUNTY MEDICAL SOCIETY met at Terre Haute, in St. Anthony's Hospital, February twelfth, with Dr. J. E. Freed as the principal speaker. His subject was "Therapy with Silver Arspbenamine." Attendance numbered tbirty-seven. Reports and discussion of proposed legislation formed a part of the program.

* * *

WABASH COUNTY MEDICAL SOCIETY members were guests of Drs. Naugle, E. D. Pearson, and Parker, at the Wabash County Hospital, February sixth. Dr. L. P. Harshman of Fort Wayne spoke on "Sterilization of the Unfit."

* * *

WAYNE-UNION COUNTY MEDICAL SOCIETY members attended a testimonial dinner at Hamilton, Ohio, January tenth, in bonor of Dr. W. H. Hawley of College Corner, Ohio (a member of the Indiana State Medical Association), upon the completion of fifty years of practice.

On January twenty-fourth, the members of this society heard Dr. George Garceau of Indianapolis, wbose subject was "Backache."

* * *

WHITLEY COUNTY MEDICAL SOCIETY members met at Columbia City, February twelfth, for a dinner meeting. Dr. A. N. Ferguson of Fort Wayne was the principal speaker, bis subject being "Diseases of the Colon." Attendance numbered eight.

Commercial Announcement

FOR SALE: "ELMHURST"—adjoining Connersville, Indiana. Institutional building; one-time private school; one-time sanitarium; fifty rooms, also two residences, all modern; sixty acres; beautifully situated on wooded hillside plateau with eastern exposure. Address Edwin Rickert, Connersville, Indiana.

LOCATION AVAILABLE FOR SALE OR LEASE: An ideal location for a group of physicians or a clinic. Well constructed, attractive building with ample parking space. Centrally located between Methodist and St. Vincent's Hospital, Indianapolis, Indiana. Address P. O. Box 368, Indianapolis, Indiana.

ASSISTANCE TO MEDICAL WRITERS. Research, Abstracts, Translations (all European languages). Papers prepared. All work done personally. Ten years' medical literary experience with institutions and leading journals. Florence Annan Carpenter, 413 St. James Place, Chicago, Illinois.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

OFFICE OF PUBLICATION: 1021 Hume Mansur Bldg., INDIANAPOLIS, INDIANA

VOLUME 28 APRIL, 1935 No. 4

ORIGINAL ARTICLES

COLLAPSE THERAPY AND PULMONARY TUBERCULOSIS*

WILL C. MOORE, M. D.
MUNCIE

The great impetus given to the early diagnosis of pulmonary tuberculosis by the examination of school children and teachers in many communities has brought before the profession in these communities the responsibility for their proper care. The program in Delaware County as directed by the county medical society and the tuberculosis association has been very thorough both in the diagnosis and in the prevention of this disease. In the school year 1933-1934 there were 3,499 Mantoux tests given to school children. X-ray examinations of the chest were done on 235 pupils. There were 421 teachers examined. There were about 230 positive tuberculosis cases found. Not many of the cases demanding prolonged care can go to the larger centers, and must be treated in the rural sanatoriums or in their local hospitals. Especially is this true in those cases needing some form of collapse therapy.

To no one single large group of afflicted people has so much relief been offered as in the treatment of pulmonary tuberculosis with surgery. The advance of surgery in this condition is relatively recent. It is, therefore, imperative that every general practitioner acquaint himself with these procedures and their proper application.

It will not be a difficult problem to men with a broad conception of general medicine to be able quickly to select the proper cases for surgical intervention, and the time and type of procedure.

* Presented before the Surgical Section of the Indiana State Medical Association at the Indianapolis session, October, 1934.

It is time that interest should be aroused in the profession in the care of this disease, and that adequate and rational phthisiotherapy be taken to the tuberculous patient in the smaller communities rather than sending the patient to the distant centers for care.

Alexander does not believe that adequate, safe medical and surgical care can be supplied to these rural sanatoriums and hospitals. He probably is right at this time, and it is a challenge to the profession which must be answered.

It is the purpose of this paper to bring before the profession the accepted methods of procedure in the care of the tuberculous patient. It has been stated that 40% of those otherwise fatal cases can be saved by functional rest of the diseased lung.

The percentage of patients subjected to some form of compression therapy varies in different localities. One therapist stated he did not believe surgery indicated at all, while others reported as high as 75% required surgery, as reported by Trout in 1932. At the present time the percentage is more generally near the latter figure.

While much work is being done in this field and many procedures have been advocated, only those which have advanced beyond the experimental stage will be discussed.

ARTIFICIAL PNEUMOTHORAX

Artificial pneumothorax is the procedure par excellence. It is the simplest and most efficient. It is not used early enough in most cases. It should be used in early infiltrative cases with positive sputum, especially when the disease, after a few months of rest, food, and fresh air, is not responding to treatment.

Bilateral pneumothorax, when there is a bilateral lesion, should be used. This should be done before cavitation and great destruction of the lung tissue has occurred. Hemorrhage is a positive indication for pneumothorax. Where there is a pleurisy with effusion, the fluid should be withdrawn and replaced with air. Bilateral pneumothorax may be

used where one side is inactive and there is an active lesion in the contra-lateral lung, or selective collapse in both lungs, placing in the thoracic cavity a limited amount of air. The portion that is involved does not have the elasticity of normal lungs; therefore, the major portion of the air will select and compress the involved area.

The two outstanding limitations of pneumothorax are: Extensive adhesions which prevent collapse, and purulent effusion which complicates ten per cent of cases in which it is used. Unfortunately these adhesions are often widespread and involve the area that needs collapse. If the adhesions are not diffuse and prove to be bands, often they can be severed. The closed intrapleural pneumolysis of Jacobaeus may be tried. Naturally a very careful study with careful roentgenological orientation of the pleuritic adhesions to be cut should be made before the thoracoscope is used. About forty per cent of these cases cannot be controlled by pneumothorax; therefore, more radical surgery must be done. This consists of phrenic neurectomy, scaleniotomy and thoracoplasty.

PHRENICECTOMY

In the last few years, phrenicectomy, either as an independent operation or in conjunction with other operative procedures, has come to be of major importance in the treatment of pulmonary tuberculosis.

While it is generally assumed that the beneficial results known to follow hemidiaphragmatic paralysis can be explained on a purely mechanical basis, recent investigation tends to demonstrate that it is much more complex. It is known that the phrenic nerve has important anastomosis with the sympathetic nervous system, especially with the middle and inferior cervical ganglia and the vagus nerve. It has frequently been observed that following phrenic avulsion in ulcerative lesions of the lung, the rapidity of clinical improvement with disappearance of rales and expectoration is entirely out of proportion to the slight ascension of the diaphragm. It seems almost certain that vaso-motor and trophic changes play an important part in the lung healing in addition to the relief of tension of the tissue.

Phrenicectomy as an independent procedure has for its greatest field of usefulness the treatment of lower lobe tuberculosis and hemoptysis. The operation is frequently used in cases in which the desired collapse was not obtained with pneumothorax. In some other cases of artificial pneumothorax, phrenicectomy is done because of its value in helping to maintain the pneumothorax by retarding the absorption of air with consequent less frequent need to refill with air.

However, at present, probably the greatest field of usefulness of phrenic nerve paralysis is to test the resistance of the good lung, as recommended by Sauerbauch, in patients upon whom a thoracoplasty is contemplated. If the good lung withstands the burden imposed upon it by the contra-lateral collapse, a thoracoplasty after several weeks is justified. Frequently it happens that the improvement in the diseased lung is so great that the contemplated thoracoplasty is never necessary. However, in this connection, many operators, including myself, are of the opinion that the procedure of choice is to precede the thoracoplasty with a phrenic neurectomy. In a small percentage of cases following thoracoplasty in which clinical recovery is slow or unsatisfactory, phrenic paralysis often accelerates improvement.

It is superfluous to mention that the mobility of each hemidiaphragm must be demonstrated before a phrenic paralysis may be attempted. Once it is planned to paralyze one half of the diaphragm, it must be decided whether a temporary or a permanent paralysis is desired. Inasmuch as the clinical results from phrenic paralysis are occasionally unpredictable, the desirability of temporary paralysis is often considerable. A temporary paralysis may be produced either by alcohol injection or by crushing the nerve with a hemostat, at the same time cutting the accessory branches. The temporary procedure is coming to be used more and more in cases with bilateral involvement. If a successful pneumothorax can be induced on one side, a temporary phrenic paralysis may be instituted on the opposite side. Then at a later date, if phrenic paralysis is desired on the opposite side supplementary to some other operative procedure, or as an independent operation, it may be performed after the function of the opposite hemidiaphragm has returned. The diaphragm has a piston-like action. When it is paralyzed, the tension on the entire lung is relieved, but in most cases of diseases of the apex with pleural adhesions, satisfactory apical collapse is not obtained because the upper portion of the thoracic cage is held up and continues to be mobile because of the action of the scaleni muscles.

APICAL COLLAPSE

The need for apical collapse associated with hemidiaphragmatic paralysis, inasmuch as disease is most commonly located in or near the apex, has recently led to combined phrenic exeresis and scaleniotomy. The procedure consists of the resection of a small portion of the three scaleni muscles through the same incision with the avulsion of the phrenic nerve. Collapse of the lung is obtained by withdrawing the support of the scaleni muscles from the apex in addition to the compression of the lung from below, subsequent to the paralysis of the diaphragm. The essentials of the operative technique are as follows: The patient is placed upon the table with the head turned toward the opposite side upon which the operation is to be done. The electro-surgical knife should not be used because of the danger of injuring important structures. The skin is prepared and draped from the infraclavicular space to the mandible and from the mid-line of the neck laterally to the ventral border

of the trapezius. The level of the incision is determined by placing two fingers above the upper border of the clavicle. The incision extends from the dorsal border of the sternocleidomastoideus to the ventral border of the trapezius, a distance of about one and one-half inches. The line of incision should be infiltrated with one-half per cent novocaine. The skin, superficial fascia, and platysma muscle are incised. Dissecting scissors are then used to uncover the anterior surface of the scalenus anticus. When the muscle is exposed, the phrenic nerve is seen running downward, inward, and slightly forward over its ventral surface. The nerve is injected with novocaine, its accessory branches cut, and the nerve slowly avulsed. A short portion of the scalenus anticus is then resected with Mayo dissecting scissors and forceps; care must be taken not to injure the fifth, sixth, and seventh cervical nerve trunks. It is usually necessary to cut a few muscle fibers of the anticus as they come off of the transverse process of the sixth cervical vertebra. The scalenus medius and posticus may be seen lying behind the cervical nerve roots. The fifth cervical nerve trunk is next gently retracted downward and medially, and the fiber of the scalenus medius and posticus are cut with dissecting scissors, and a portion about 1 centimeter in length resected. It is important that the fibers that arise from the transverse process of the seventh cervical vertebra be cut to prevent their subsequent hypertrophy and increase of function. Extreme care must be exercised throughout the entire operation not to injure nerves. While it is still too early accurately to evaluate this procedure, indications are that it will find an important place in the treatment of apical lesions and will probably be more satisfactory than phrenicotomy alone.

A period of three to six months should elapse after phrenic neurectomy and scaleniotomy before thoracoplasty should be done. Improvement will have reached its maximum in this period of time. Often further surgery will not be indicated. Especially is this true in those cases where the involvement is rather limited either at the base or in the apex. Those cases where the cavity is in the dome and the wall is too thick to allow shrinkage a limited thoracoplasty with removal of first and second ribs possibly will render symptom free a large group of these patients with apical lesions. About thirty-five per cent of those patients who are selected for collapse therapy will need thoracoplasty. The extent of the thoracoplasty can be fairly accurately determined by the lesion present.

PARTIAL THORACOPLASTY

Partial thoracoplasty carries with it very little risk and may be placed to obliterate the offending cavity. If the lung collapse is not sufficient to close the cavity, more ribs may be removed. Apical lesions respond to the removal of the upper three or four ribs by posterior thoracoplasty. Long segments of the ribs should be removed. The failures in collapse have been in many instances due to the removal of too small a segment of rib. Through the posterior incision the rib should be exposed from the vertebral attachment to as far forward as possible and should be removed to that extent. If a portion remains next to the vertebra, the entire operative procedure may be defeated. Often it is well to resect the tranverse process that a complete obliteration of the cavity may be obtained.

Thoracoplasty should be done with very little operative risk if the patient is carefully selected and the procedure done in stages. It is a great temptation with complete anesthesia and excellent exposure to extend the operative procedure to the removal of six or seven ribs, but it is much safer for the patient to limit the operation to the removal of three or four ribs.

OPERATIVE PROCEDURE

It is not the purpose of this paper to go into surgical technique in detail. Our procedure has been adopted from others and simplified to assure the greatest safety to the patient and bring about the most effective obliteration of the lesion.

We believe that local anesthesia should be used. Morphine gr. ¼, with hyoscine gr. 1/150, is given one hour before surgery. Novocaine one-half per cent is used as a local anesthetic with about seven minims of adrenalin.

The patient is placed in a prone position with the arm over the edge of the table and a pillow under the chest toward the side to be operated. It is our practice to use the electro surgical unit through skin and muscles, clamping and tying the larger vessels. Very little blood is lost by this method and the time consumed in exposing the ribs is lessened. We believe, however, that the larger vessels should be tied, because post-operative hemorrhage may occur if coagulation is depended upon with the larger vessels. By severing the attachments of the serratus muscles, the scapula can be elevated and retracted laterally. This gives easy access to the ribs so that long segments may be removed. The first rib is clearly brought into the operative field and removed under direct vision. We have had very little complaint of dyspnea. We check on the condition of the patient after the removal of each rib as to fatigue, shortness of breath, pain, and general weakness. At any time the condition of the patient indicates, the operation is terminated.

When a rather extensive collapse is planned, the upper ribs are attacked first, usually the fourth, third, second and first. The removal of the lower one of the group facilitates handling in the order named. The second stage may be done in a week or ten days if the condition of the patient will permit. The blood is rechecked and, if low, a blood transfusion is done before the next procedure is attempted. The length of time consumed in the operation should not be over an hour and should not develop into an endurance contest between the patient and the operator.

Where there is a complete involvement of the lung and the patient is running sputum with bacilli present after posterior thoracoplasty, an anterior lateral incision should be made and the remaining segments of ribs removed with a portion of their cartilaginous attachment. This should be done also when there is a tuberculous empyema. We close the wound with chromic catgut, with silk in the skin, and drain from dependent part of the incision with a large rubber dam drain. A very thick dressing is placed over the incision in order to compress the wound. The adhesive tape should not infringe upon the opposite side and restrict its movement.

110 N. Cherry St.

DISCUSSION

J. H. Stygall, M. D. (Indianapolis): I think that surgeons should be taking more interest in treating tuberculosis by surgery. Dr. Moore has brought out all of the latest methods.

Dr. Edward Rist, director of the Pasteur Institute in Paris, said several years ago that every case of tuberculosis that dies had been suitable some time during the course of the disease for some form of compression therapy. We know now that the rest cure alone, that is, bed rest alone, will not always cure these cases. We do know that prolonged rest will close cavities in some instances, and we also know that we have to use other methods of treatment to close these cavities when the rest cure fails. We can prolong life in many of these cases, and we also can cure a certain percentage of them. I do not believe seventy-five per cent is too high to consider in choosing some form of compression after the rest cure has failed. I believe that is the figure they have at the Chicago Municipal Sanitorium. They have 1,200 beds there, and they told me that about seventy-five per cent are given some form of compression therapy.

When considering some form of surgery, it is very important to have an x-ray check of the case, and to be sure that it is not a really active case, particularly for thoracoplasty. I would not include phrenicotomy or pneumothorax in that classification. An active case may have a pneumothorax even with a temperature, or he may have a phrenic operation; but thoracoplasty is a very radical procedure and we usually like to have an inactive case for that. A chest man's opinion should be the deciding factor.

CASE REPORTS

A girl, working in an office, developed tuberculosis while working. She had been coughing for about a year. She had noticed some pain in the chest and was being treated for sinus trouble. An x-ray of the chest showed a large cavity at the top and marked involvement of the right lung. A phrenic operation was done in June with the result that the cavity is almost closed, and while she has a little sputum, she has gained twenty-five pounds in weight, pulse and temperature are normal, and we think the phrenic operation alone in this case will close the cavity and arrest the disease, even though the cavity is in the top of the lung.

Showing the value of compression measures, a boy had a large cavity in the central chest zone, right side; sputum was loaded with bacilli. Pneumothorax was instituted and the lung collapsed. Here the pneumothorax was pushed up to positive pressure. There are adhesions above and below which prevented the lung from completely collapsing and the cavity is still open. He still has hemorrhages. In such a case if you can raise the diaphragm and relax the adhesions by a phrenic neurectomy, very frequently the cavity will close. That was done in this case—the diaphragm came up, the adhesions relaxed, and the boy is working on the farm. He comes in every six or seven weeks to get a little air; at first he came every two or three weeks. The combination of phrenic-pneumothorax usually lengthens the intervals of pneumothorax treatments.

One patient had a very large cavity in the left lung. There is always a question of judgment as to when a case should have thoracoplasty. This patient was not going to get well with the cavity there, and she had some trouble in the right lung. In fact, that is where it started, became quiescent, then started in the other side, and that is where the trouble is now—a large cavity and the sputum loaded with bacilli. Pneumothorax was tried and partial collapse secured. She also had a phrenic. The question is, should a thoracoplasty be done? I thought the girl was going to die. The right side sounded dry. She wanted to go ahead with it. She spent two weeks in an Ohio hospital where they decided she was inoperable; she came back here and had a complete thoracoplasty. The sputum is negative and she has gained almost too much weight.

Another case showed a central chest zone cavity. This type of cavity will close where a phrenic is done. There was a cavity with infiltration around the lung. Pneumothorax was tried, but no result obtained because of adhesions. Then a phrenic was done and about six months later the cavity closed. There is no sputum. That was in 1932, and she has had no symptoms from the rise of the diaphragm.

Some people criticize the phrenic operation as causing digestive disturbances, but I think there are very few that will really give any symptoms after a phrenic. Of course, as Dr. Moore has said, the phrenic is not being done completely so much now as a temporary measure, and then if good results are not obtained you can go in and do a permanent, and although you get atrophy of the diaphragm, I do not believe there are any bad complications from bringing the diaphragm up.

About 1,800 to 2,000 people die every year in Indiana from tuberculosis; I think probably forty per cent could live longer and a good percentage of them be saved. I hope the surgeons will take more interest in doing more of this work and saving some of these patients who will die otherwise.

QUALITATIVE BLOOD CELL CHANGES IN THE HUMAN DUE TO VITAMIN A*

PAUL D. CRIMM, M. D.
DARWIN M. SHORT, A. B.
EVANSVILLE

This report covers 1,483 hemograms on 40 individuals—25 normal adults and 15 patients chronically ill with tuberculosis. Each individual was considered a control prior to being placed on any subsequent experiment. Six hundred and eighteen (618) control and 865 experimental hemograms ranged over a period of 22 months. Hemograms consisted of differentials of both Arneth and Schilling, although Arneth is the only one herein reported. Hemoglobin (Newcomer) and red and white counts were done routinely. Counts and smears were performed by the same individual, in order to minimize any variations due to the personal factor. All individuals were on the same dietary and lived in the same institutional environment. Any normal individual with an infection, as indicated either by a quantitative or a sudden qualitative blood cell centile change, was discarded. The findings herein reported are the cumulative results of serial qualitative counts.

In view of the findings of Doan and Zerfas[1] on the wide range and extreme degree of variation of the Schilling and Arneth counts in cases of infection, hourly serial counts were made on well individuals. Likewise, counts and differentials were made on normals, before and after administration of 15 minims of epinephrin. After the injection of epinephrin a post-injection leucocytosis was found with essentially the same qualitative findings as prior to injection. From these data (unpublished) it was concluded that the variation of the qualitative phase of the hemogram is negligible in health and controlled environment.

RESULTS

Table I shows the average of the Arneth indices on 15 normal adults. Group I was used as controls. Groups II and III were carried on a 24-day control period. After this control period, group II received 153,600 I.U. of vitamin D as viosterol† over a period of 64 days. Group III received 151,200 I.U. of vitamin D and 4,410,000 I.U. of vitamin A as halibut liver oil‡ over a period of 63 days. Group IV received 230,430 I.U. of vitamin D and 6,720,000 I.U. of vitamin A as halibut liver oil over a period of 96 days. Although they received no medication, the controls (group I) showed an Arneth index change of 2.7 as the difference between the control and experimental periods. In group II, the Arneth index change likewise demonstrated a "left shift" of 2.5, the difference between the control period and the period when vitamin D as viosterol was administered. In group III, a "left shift" of 6.5 occurred between the control period and the period when halibut liver oil was given. This group received approximately the same quantity of vitamin D as group II. Therefore, vitamin D probably is not responsible for the increase in the younger neutrophil cells. In group IV, the "left shift" was 10.5, the difference between the control period and the halibut liver oil period. This prolonged administration of vitamin A as halibut liver oil increased the "left shift." The controls (group I) and the vitamin D group (group II) showed a "left shift" during this particular period of time. Even if the "left shift" change of either group were subtracted from the "left shift" change of the halibut liver oil group, the "left shift" remains significant.

Table II shows the results on 10 normal individuals before and after administration of vitamin A as halibut liver oil. The average of their Arneth indices was 76. Following the administration of halibut liver oil the average of the Arneth indices was 82—a "left shift" of 6. All ten individuals showed a "left shift" following the administration of vitamin A except case 6. The number of vitamin A units as halibut liver oil administered to each individual is listed in table II. Since the effect of vitamin D was eliminated in the preceding experiment, vitamin A is again considered responsible for the increase in the younger granulocytes.

TABLE I.

Arneth Index Findings in the Normal Adult Before and After Administration of Vitamins D and A

Group	Case No.	Control Period (Days)	Arneth Index Average Control Period	Experimental Period (Days)	Arneth Index Average Exper. Period	Arneth Index Change	Total No. of I. U. Adm. During Experimental Period
I	A	24	75	64	78	3.0	Controls
	B		73		76	3.0	
	C		68		70	2.0	
Arneth Index Average Difference (Left Shift)						2.7	
II	D	24	71	64	74	3.0	153,600 I. U. of Vitamin D (As Viosterol)
	E		63		64	1.0	
	F		66		69	3.0	
	G		82		85	3.0	
Arneth Index Average Difference (Left Shift)						2.5	
III	H	24	82	63	87	5.0	151,200 I. U. of Vitamin D, and 4,410,000 I. U. of Vitamin A (As Halibut Liver Oil)
	I		68		73	5.0	
	J		78		83	5.0	
	K		78		87	9.0	
	L		72		79	7.0	
	M		69		77	8.0	
Arneth Index Average Difference (Left Shift)						6.5	
IV	N	24	72	96	83	11.0	230,400 I. U. of Vitamin D, and 6,720,000 I. U. of Vitamin A (As Halibut Liver Oil
	O		69		79	10.0	
Arneth Index Average Difference (Left Shift)						10.5	

* From Boehne Tuberculosis Hospital, Evansville, Indiana.

[1] Doan, Charles A., and Zerfas, Leon G.: *The Journal of Experimental Medicine*, Vol. XLVI, No. 3, pp. 511-539, 1927.

† 10,000 I.U. vitamin D as viosterol, 250 D, per gram. Mead Johnson and Company, Evansville, Indiana.

‡ 50,000 I.U. vitamin A per gram; 1,200 I.U. vit. D per gram. Mead Johnson and Company, Evansville, Indiana.

TABLE II

Arneth Index Findings in the Normal Adult Before and After Administration of Vitamin A

Case No.	Control Period (Days)	No. of Blood Counts	Average Arneth Indices	Duration of Admin. Vitamin A as H. L. O. (Days)	Number of I. U. Vit. A Administered	No. of Blood Counts During Admin.	Average Arneth Indices
1	15	8	70	118	8,260,000	56	80
2	15	8	68	108	7,560,000	56	75
3	108	53	82	125	8,750,000	62	89
4	25	12	78	64	4,480,000	32	82
5	26	12	80	64	4,480,000	32	85
6	24	12	84	67	4,690,000	38	75
7	26	10	66	72	5,040,000	32	74
8	88	40	76	64	4,480,000	32	85
9	26	13	82	64	4,480,000	32	89
10	88	45	77	62	4,340,000	35	84
Average			76				82

TABLE III

Arneth Index Findings in Cases of Pulmonary Tuberculosis Before and After Administration of Vitamin A

Case No.	Control Period (Days)	No. of Blood Counts	Average Arneth Indices	Duration of Admin. Vitamin A as H. L. O. (Days)	No. I. U. Vitamin A Adminis.	No. of Blood Counts During Adminis.	Average Arneth Indices	Average Temperature
1	53	23	73	49	3,430,000	13	89	Normal
2	53	24	82	49	3,430,000	13	90	Normal
3	46	23	87	40	2,800,000	11	88	Normal
4	88	42	88	46	3,220,000	23	82	99.6
5	25	12	86	96	6,720,000	10	90	Normal
6	39	20	81	99	6,930,000	8	86	Normal
7	26	13	86	61	4,270,000	28	90	99.6
8	10	5	82	79	5,530,000	39	83	Normal
9	26	13	97	61	4,270,000	30	96	Normal
10	23	12	82	64	4,480,000	12	92	Normal
11	47	24	84	40	2,800,000	10	85	Normal
12	88	44	93	61	4,270,000	31	84	Normal
13	25	12	88	68	4,760,000	32	79	100.5
14	24	12	95	37	2,590,000	15	92	100
15	106	53	70	126	8,820,000	63	77	Normal
Average			85				87	

In table III are listed 15 patients chronically ill with pulmonary tuberculosis. The average of the Arneth indices during their control period was 85. Following the administration of vitamin A as halibut liver oil, the average of the Arneth indices was 87. Ten of these patients demonstrated a "left shift" following the administration of vitamin A as halibut liver oil. Nine of these same ten patients showed a "left shift" after the administration of halibut liver oil without exhibiting any evidence of any clinical activation. Case 7 showed a "left shift" after the experimental period and had periodic febrile exacerbations. Cases 3, 8 and 11 had a "left shift" of only one point, which is probably insignificant. Five cases demonstrated a "right shift." Three of these had slight elevations of temperature frequently. A "left shift" of 2 occurred between the control period and experimental period in this group (table III). Thus, vitamin A as halibut liver oil did not produce a significant shift in the Arneth indices in the presence of tuberculous infection. In the afebrile cases a "left shift" occurred, but further work is required to determine whether it is due to either infection or vitamin A, or both factors.

During the entire period of 22 months, only one individual (case 7, table III) of all three groups (tables I, II and III) had a slightly elevated white count (12,722) during the control period. Hemoglobins in all three groups did not vary before or after the administration of halibut liver oil. No changes in red cell counts were noted. The first two groups (tables I and II) gained slightly in weight. The third group (table III) showed a slight loss of weight during the administration of halibut liver oil.

DISCUSSION

In our work[2] on 369 vitamin A deficient rats, we observed that a "right shift" in the Arneth index occurred in early vitamin A deficiency. In these vitamin A deficient rats the gross count was not affected, but the count indicated the "right shift" to be constituted of older cells. It was further noted that following the "right shift," due to vitamin A deficiency, the administration of vitamin A as halibut liver oil stimulated the formation of younger granulocytes ("left shift"). In this work on normal human adults, vitamin A likewise increased the number of younger neutrophil cells. Following the administration of vitamin A as halibut liver oil, the Schilling hemogram (data unpublished) demonstrated, first, new cell formation. The Arneth index reflected, secondly, the persisting qualitative changes in the neutrophils. During the prolonged administration of vitamin A, the Schilling hemogram showed essentially the same shift as the Arneth. In the adult a most significant finding, due to the administration of this vitamin, was the qualitative change in the white cells without quantitative change.

An individual takes from two to three million I.U. of vitamin A before a definite response in the neutrophil cells is noted. This qualitative response results from the prolonged administration of halibut liver oil. The amount of vitamin A already stored in the liver may have some bearing on the rapidity of this physiological effect. Some individuals lose the manifested "left shift" within two months after discontinuing this oil. The effect of the administration of large amounts of vitamin A on individuals with tuberculous infection was not conclusive, except that a "left shift" occurred in ten patients. In the presence of this infection either vitamin A or the infection, or both, could be responsible for the "left shift."

Sufficient data have accumulated from our laboratory and clinical work to show that a "left shift" occurs with the administration of vitamin A as halibut liver oil. This work is contrary to the views heretofore presented in the literature, namely, that a "left shift" only indicates an increased toxicity from an infection.

[2] Crimm, Paul D., and Short, Darwin M.: *The American Journal of Physiology*, March, 1935, pp. 397-405.

SUMMARY

1. In this experiment on vitamin A the possibility of the effects from vitamin D have been under control. All other vitamins were adequately supplied, and A was given in large amounts.

2. In patients chronically ill with pulmonary tuberculosis, either vitamin A as halibut liver oil, or the tuberculous infection could be responsible for the "left shift" in the Arneth index. After the administration of halibut liver oil, ten cases showed a "left shift" and five a "right shift."

3. Following the administration of vitamin A as halibut liver oil, a "left shift" of the polymorphonuclear neutrophils occurred in normal individuals. This qualitative change occurred without affecting the gross white count.

(The authors gratefully acknowledge the valued assistance of Miss Grace L. Heimann.)

CANCER THERAPY AND THE GENERAL PRACTITIONER*

CHESTER A. STAYTON, M. D.
INDIANAPOLIS

In Indiana every year more people die from cancer than from any other cause except cardiovascular disease. The death rate has increased from 39 per 100,000 in 1900 to 111 per 100,000 in 1932. This rate is an increase in reported cancer deaths of about 300%. These figures and others used in this paper were obtained from the Indiana State Board of Health. They represent the cause of death as given by the average Indiana physician.

Cancer now ranks second as the cause of death in the United States. As shown by the U. S. Public Health statistics it has risen from sixth place in 1900 to its present position in 1929.

An analysis of the U. S. cancer death statistics for the year 1930 gives the number and percentage of the total (115,265) for the various organs of the body.

Stomach and liver	38,703	33.5%
Unspecified organs	25,515	22 %
Peritoneum, intestines and rectum	17,151	15.2%
Female genital organs	16,422	14.2%
Breast	10,912	9.4%
Buccal cavity	3,543	3 %
Skin	3,019	2.6%

A study of the cancer deaths by age groups shows the most vulnerable age period to be from 65 to 69 but with no age period escaping. About 56% of the total were female and 44% male.

The U. S. statistics for 1933 reveal an increase of 13,000 in the total number of registered cancer deaths when compared with 1930.

The increase in the number of reported cancer deaths is, I believe, due to more accurate reporting, better diagnosis, and the fact that more people live to the cancer age than to any alarming increase in cancer incidence.

A patient with early cancer or with a suspected cancer constitutes an emergency demanding immediate action on the part of the physician and the patient. Delay amounts to negligence and is always dangerous, especially when the cancer is one which has a high cure ratio if treated before it has extended beyond the primary lesion. Much human suffering and part of the increase in the mortality rate can be blamed directly on the attitude of the medical profession. Many physicians are indifferent toward the cancer problem because they do not see the patient until after the disease is far advanced and hopeless in so far as a cure is concerned.

* Presented before the Indianapolis Medical Society, November 27, 1934.

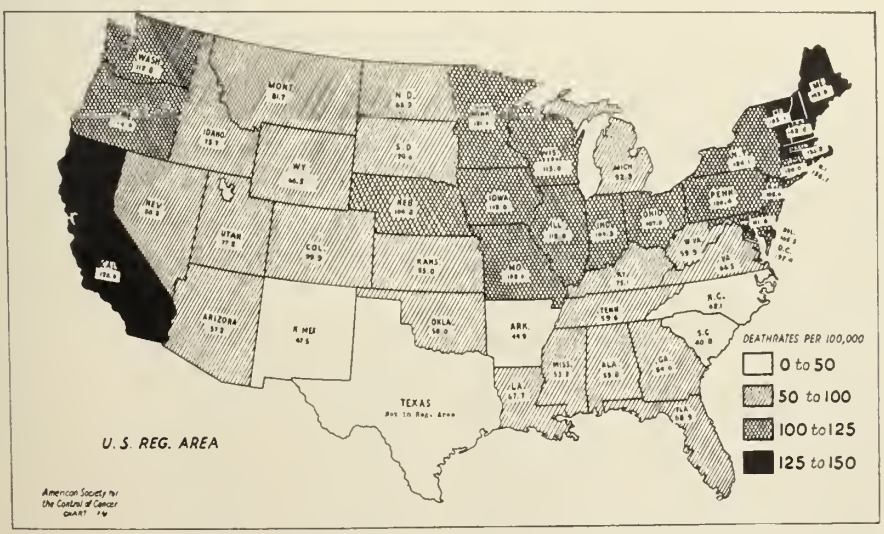


Fig. 1. Cancer and other malignant tumors. Crude death rates per 100,000 population, 1930.

The family physician is the first line of defense in the battle against this parasite like monster, both from the standpoint of spreading propaganda for periodic examination of the more vulnerable organs and the arrangements for immediate treatment of early lesions. It is indeed fortunate that the greater percentage of malignancies which are curable occur in organs quite accessible and can be examined adequately without elaborate equipment. These are cancer of the skin, the buccal cavity, cervix and breast.

Early cancer does not give text book symptoms but those of a chronic inflammation that will not remain healed, a persistent small nodule or lump, obstruction of some kind, hemorrhage, anemia or weakness. Pain cannot be classed as an early symptom.

When considered from the standpoint of cancer diagnosis four types of patients enter a physician's office:

1. The Patient With An Obvious Cancer, as a lump in the breast and glands in the axilla; an indurated ulcer of the tongue with submaxillary glands, or an eroded cervix with history of hemorrhage. These are seldom misdiagnosed but the treatment is often delayed.

2. The Patient With Pre-Cancerous Lesion, as a pigmented inflamed mole, senile keratosis, a leukoplakic spot in the mouth, or a scarred and inflamed cervix. These are observed but usually not treated.

3. The Patient With Localized Symptoms Suggesting Deep, Inaccessible Cancer, as blood in the urine or stools, persistent pain in the stomach, or tumor formation and pain in a long bone. Final diagnosis here can only be made by an exhaustive examination including x-ray studies.

4. The Patient With no Symptoms Characteristic of Cancer, which nevertheless exists and may even be advanced. Examples of this type of patient will be found in almost every type and classification of malignant growth. For these a painstaking history may develop a diagnostic lead.

If the patient has cancer inappropriate treatment and delay invariably is fatal. No such situation exists with any other major cause of death. If the lesion or tumor should prove to be benign, early surgery, with or without pre-operative radiation, is to the patient's advantage.

Even with the maze of disputed facts, questionable statistics and false claims, there is the one method of treatment for each individual case that will offer the patient the best chance for relief of distressing symptoms, prolongation of life, or complete recovery.

The most important explanation for the cancer patient's failure to get correct medical advice is the fact that he or she does not consult a physician soon enough. The patient cannot know the seriousness of the symptoms or illness unless he is properly instructed. How many of your women patients over 35 or 40 years of age think that the first symptoms of cancer of the breast and uterus is severe pain? It is almost legendary with the laity that a cancer has long roots and that the very first manifestation is pain. Our county, state and national organizations have had no cancer program. Public Health agencies have not given it much consideration because cancer is not contagious and does not appear in epidemic form.

The American Society for the Control of Cancer, with headquarters in New York City, is attempting a state and county organization for Indiana.

It would be very presumptuous on my part to take up your time with a long discussion of the diagnosis of the particular types, as I am sure that you are familiar with the details. A biopsy is the only procedure that will give much additional information, and such procedure is necessary in only a small percentage of cases. A safe rule is—"When in doubt, seek immediate consultation."

Surgery and x-ray and radium radiation are the only effective measures for the treatment of any form of cancer. Many patients are most effectively

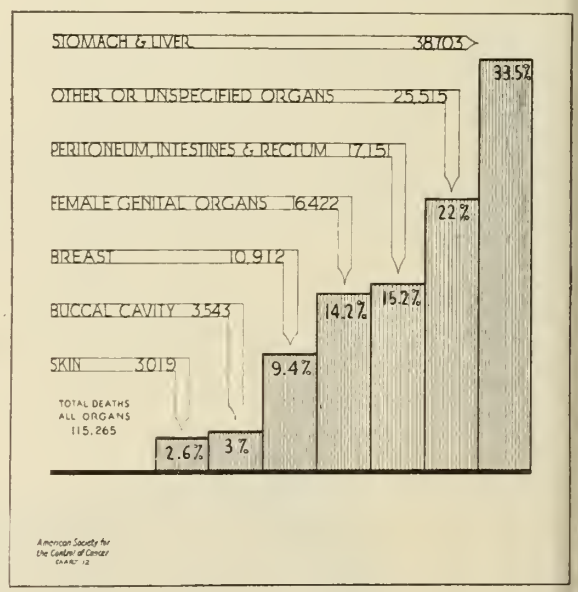


Fig. 2. Cancer deaths by organs, 1930. Early diagnosis and treatment would have saved many of these lives.

NUMBER OF CANCER DEATHS—U. S. REGISTRATION AREA, 1933

	Number Deaths	Rate per 100,000
Total Cancer and Other Malignant Tumors	128,475	102.2
Of Digestive Tract and Peritoneum	63,174	50.3
Of Uterus	15,220	12.1
Of Breast	12,484	9.9
Of Other or Unspecified Organs	11,110	8.8
Of Male Genito-Urinary Organs	10,455	8.3
Of Respiratory System	4,939	4.0
Of Buccal Cavity and Pharynx	4,845	3.9
Of Skin	3,358	2.7
Of Other Female Genital Organs	2,890	2.3

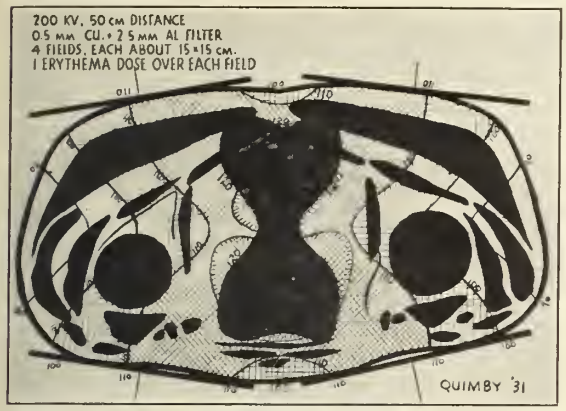


Fig. 3. Pelvic depth dosage using four ports.

treated by a combination of the three methods. The relative merits of each depend upon the general condition of the patient, the variety and location of the cancer to be treated, and the physician who is using it.

Surgery includes the radio-knife and all forms of destruction by electrical or other appliances.

Irradiation is applied to cancer therapy in practically all its forms. The unfiltered x-ray and radium rays are very effective in some superficial lesions, while the heavily filtered rays are useful in the deeper seated and more resistant types of cancer. The result desired is a destruction or sterilization of the cancer cells without permanent damage to normal tissues of the cancer bed or unfavorable systemic reaction of the patient. This form of therapy is based on the fact that embryonal cells or cells in the process of mitosis are more sensitive to irradiation than fully developed or adult cells. The theory of pre- or post-operative radiation is based entirely on this fully established clinical fact.

Deep x-ray therapy has been advanced to a much higher plane of effectiveness in the last few years. Clinical research in this field is enormous. Voltages of from 200,000 to 1,000,000 with various types of filters are being used. Perhaps one best standardized technique will result. Since the adoption of the international "r" unit as a measure of the quantity of a given quality of x-ray radiation, methods and results of different roentgenologists are comparable.

Saturation methods by using deep therapy x-ray are common practice. By this method the diseased tissues are saturated with radiation during cell division, by doses carefully calculated as to per diem loss and normal tissue tolerance. This is based upon the latent period of radiation effects until ultimately a maximum dose is delivered which is larger than can be safely administered by other procedures. Skin reaction resulting from the careful use of this method subsides in from 2 to 4 weeks with no apparent undesirable after effects.

High voltage roentgen saturation may be obtained by one of two methods, i. e., giving small doses daily (or twice daily) for 30 to 40 days—(Coutard's) remaining always within biological tolerance; or by Pfahler's method, which brings the skin areas and tumor to saturation as rapidly as possible, and maintaining this saturation for 21 days, by replacing the loss every 3 to 5 days. (See diagramatic chart, figure 4.)

Radium therapists are advocating a more thorough and complete initial treatment using platinum filters. In many cancers where contact application of radium is indicated as the therapeutic agent, the chance for a permanent cure rests with the completeness of the first treatment. Some institutions with unlimited financial resources are providing large quantities of radium element 2 to 8 grams—as a pack or bomb. This method of application has resulted in radiation which is very effective in treating some of the deeper, more resistant and wider spread lesions where contact application is not possible.

Let us consider in a general way the more outstanding factors in the management of the curable types of cancer:

1. *Cancer of the Skin:* is the most curable of all forms yet 500 deaths from this cause were reported in Indiana from 1928 to 1932. It may affect any part of the body surface but most often it appears on or about the face. The first early symptom is usually a small painless ulcer that will not heal or a noticeable change in some common skin defect which has quietly existed for weeks, months or even years. There is practically never any pain until the lesion extends into deeper structures. If treated early and thoroughly the results are 100% satisfactory. Even patients with advanced cancer of the skin show a high cure ratio.

X-ray, radium and surgery are equally effective in destroying early skin cancer. X-ray and radium are given preference because of convenience to the patient and diminished hazard and scar formation.

When the lesion covers a large area (that is,

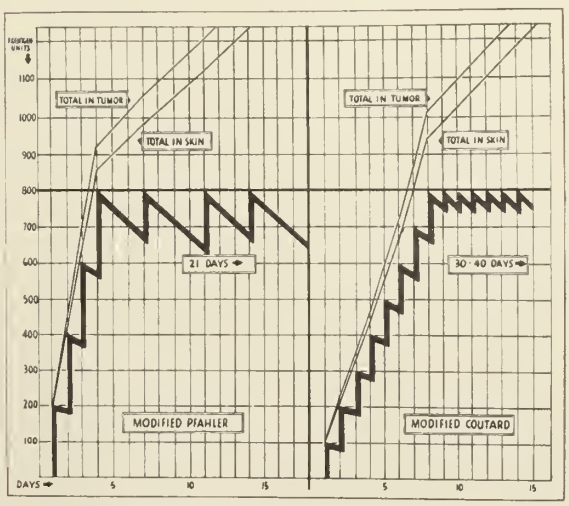


Fig. 4. Graph of saturation technic.

an inch or more in diameter), or when metastasis has begun a combination of two or more of the therapeutic agents may be indicated.

It has been shown that from 10 to 12 erythema doses of effective radiation will kill almost any type of epidermoid cancer cell. This amount of radiation delivered to an area of the skin will cause a severe reaction and if less than ½ inch in diameter, will be completely healed in 30 days, leaving practicaly no scar. The cancer cells must be irradiated to the point of destruction, without permanently damaging the integrity of the normal tissues.

Most all of the radiation failures have been due to insufficient dosage. Accurate calibration of equipment and tube permit the same degree of skill in measuring dosage as in filling a prescription for drugs. A faulty initial treatment may rob the patient of the only chance of a cure. An inadequate dose often cannot be corrected by a future supplemental treatment.

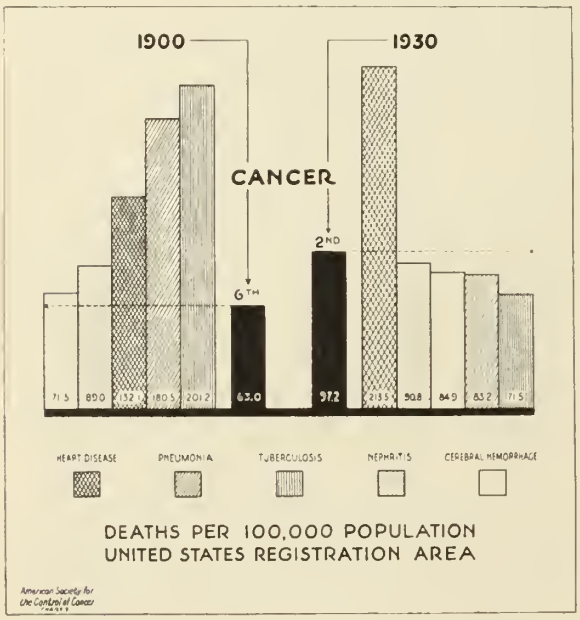


Fig. 5. Cancer now ranks second as cause of death.

PRINCIPAL CAUSES OF DEATH U. S. REGISTRATION AREA, 1933

	Number Deaths	Rate per 100,000
Heart Disease	286,356	227.8
Cancer and Other Malignant Tumors	128,475	102.2
Cerebral Hemorrhage, Softening, etc.	105,554	84.0
Nephritis	104,263	82.9
Pneumonia	86,947	69.2
Tuberculosis, all forms	79,836	59.5

PRINCIPAL CAUSES OF DEATH, INDIANA VITAL STATISTICS, 1932

	Number Deaths	Rate per 100,000
Heart Disease	6,002	183.2
Cerebral Hemorrhage	3,738	114.1
Cancer and Other Malignant Growths	3,626	110.8
Pneumonia	2,869	90.6
Nephritis	2,399	73.2
Tuberculosis	1,964	59.9

2. *Cancer of the Uterus:* There were 2,500 deaths reported in Indiana from 1928 to 1932 as the result of cancer of the female genital organs. What percentage of these was due to cancer of the cervix or uterus is not shown. Cancer of the cervix is the most frequent form in women. The age incidence is between 40 and 50; however, there are many cases before and after this age period.

The earliest sign is often a thin, odorless discharge, inter-menstrual bleeding, or hemorrhage after the menopause. Pain is practically never present in the beginning. A diagnosis can only be made by means of a pelvic examination. Curettage or section for biopsy are frequently necessary to establish the diagnosis and determine the radiosensitivity.

Early diagnosis and thorough treatment will result in a gratifying number of cures. Educational publicity will further the cause of early diagnosis but it will not fully accomplish its purpose until women past 40 years of age comprehend the necessity of periodic pelvic examinations, and until every physician is brought to the realization that examination of a female patient is not complete unless a thorough pelvic examination is made.

The treatment of cancer of the cervix and uterus in the large cancer clinics where all methods are available is handled almost exclusively by the radiological departments. There are some gynecologists who favor surgery for the treatment of early uterine cancer—that is, where the lesion is limited to the cervix or the curettement shows cancer cells and the uterus is freely movable. For the more advanced cases radiation therapy is universally accepted as the rational treatment.

Healy[1] states that "actually 10 to 15% of the cases are sufficiently early to permit satisfactory and thorough surgical removal (the Wertheim operation). A simple vaginal or abdominal hysterectomy is a futile procedure for the advanced case as the operative incisions pass directly through the cancer bearing structures and in a few weeks a rapid recurrence of ulcerating carcinoma appears at the vaginal vault." Radiation therapy for this type of recurrence is only palliative.

Schmitz[2] using heavy x-ray dosage and radium therapy since 1924 finds the "relative curability in the *beginning clearly localized clinical group 1* cancers is from 75 to 90%; in the *doubtfully localized clinical group 2* cancers from 35 to 50%; in the *clinical group 3* cases, involving the parametrium, when the mass retains a fair degree of mobility, from 10 to 25%, and in the terminal fixed carcinomas, i.e., *clinical group 4* cases, it is practically zero."

[1] Healy, William P.: Treatment of Carcinoma of the Cervix. *N. Y. St. Jrnl. of Med.*, Jan., 1934, and *Bul. Am. Soc. Con. Cancer.* March, 1934.

[2] Schmitz, Henry: The Effect of Radiation Technique and the Early Diagnosis of Carcinoma of the Uterine Cervix on the Five Year Good End Results. *Radiology.* Oct., 1933.

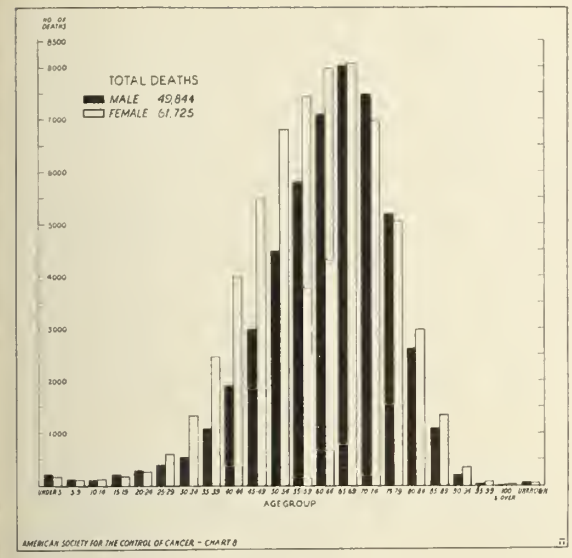


Fig. 6. Cancer deaths by age groups.

Gardner and Finola[3] in their *collective review* of the recent literature on malignant tumors of the uterus draw this conclusion: "No method of treating cancer of the cervix seems to be complete unless it includes deep radiation therapy. Regardless of the extent of the lesion or the type of major therapy deep radiation is almost universally regarded as a necessary follow-up procedure to stop development and spread of cancer cells not destroyed by the original treatment."

3. *Cancer of the Breast:* Next to carcinoma of the cervix this is the most common form in women. The age incidence in the two forms is practically the same. Statistics would seem to indicate that breast cancer occurs more frequently in single women than in married women. The first sign of breast cancer is a lump in the breast; this is usually painless. A few of them begin with a watery or blood-stained discharge from the nipple. Early diagnosis and immediate treatment are essential to obtain a cure in any type of breast malignancy. The chances for a satisfactory result decrease with each week's delay.

Adair[4] says, "Surgery today in our best clinics is accomplishing from 35 to 38% of 5-year cures. The Memorial Hospital of New York has a 5-year cure record of 39½%. This is by the combined use of a short pre-operative radiation cycle, the employment of a radical mastectomy followed in about six weeks by a post-operative radiation cycle." These figures are based upon all types of cases, early, borderline and advanced.

Gratifying results from radiation alone may be had in some radically hopeless cases. The tumor may even be reduced to where it can be removed surgically and there is often immediate relief from pain. Pfahler, Adair, Bloodgood and Soiland are recently advocating saturation methods of pre-operative irradiation for early operable cases as well as the more advanced ones. To me this method is more rational than any previously used. It is admitted by the leading surgeons that the surgical treatment has not been improved on since the Halstead operation and surgery alone has resulted in about one 5-year cure out of three operated.

Deep therapy x-ray, cross-firing to the center of the tumor and metastatic glands (if present) through 2 or 3 ports is recommended. This treatment may be given by one of the two saturation methods. The Pfahler method is the more economical, requires fewer visits to the office and is better adapted to out-patient use. A well developed skin reaction will result in either case. This completely subsides in from 2 to 4 weeks and the operation is then performed. As a precaution a promise must always be obtained from the patient that she will submit to the operation because often there is so much improvement in the appearance of the tumor and the general condition that the patient thinks the operation unnecessary.

Post-operative radiation may be started in from 3 to 6 weeks. The amount of radiation that can be given the new connective tissue and the skin without damage is not sufficient to completely sterilize cancer cells if they are present; consequently cancerous glands which could not be removed surgically should be blocked off and treated by saturation dosage.

Paget's disease of the nipple and the anaplastic tumors are very radio-sensitive. In each of these roentgen therapy is indicated. In Paget's disease it is almost a specific cure. In the anaplastic type the tumor and metastasis will completely disappear but soon returns and becomes radio-resistant. Surgery in this type only hastens death. There were 1,056 reported deaths from cancer of the breast in Indiana from 1928 to 1932.

4. *Cancer of the Buccal Cavity:* This disease entity accounted for 533 deaths in Indiana from 1928 to 1932. It is more common in men than women. It usually occurs after 50 years of age and frequently begins with a small nodular erosion situated on the tongue, inside of the cheek, on the floor of the mouth or the mucous surface of the lip. It is painless until far advanced. If there is metastasis the mortality rate is very high. Thorough radium irradiation has given the best results in the treatment of the primary lesion. This should always be accompanied by high voltage x-ray treatment to the dependent lymphatic system as metastasis occurs very early. The x-ray therapy should be given by the saturation method and cross fired from each side. Pfahler and Vastine[5] report 39.2% recovery in 171 unselected patients treated

[3] Gardner and Finola: The Recent Literature on Malignant Tumors of the Uterus. Collective Review. *S. G. and O.*, Jan. 1934.

[4] Adair, Frank E.: The Response of Various Types of Breast Cancer to Radiation. Symposium on Cancer Therapy. *Proc. Radiol. Soc.*, Dec. 6. 1928.

[5] Pfahler and Vastine: Irradiation Therapy in Cancer of the Mouth. *Radiology*. Jan., 1934.

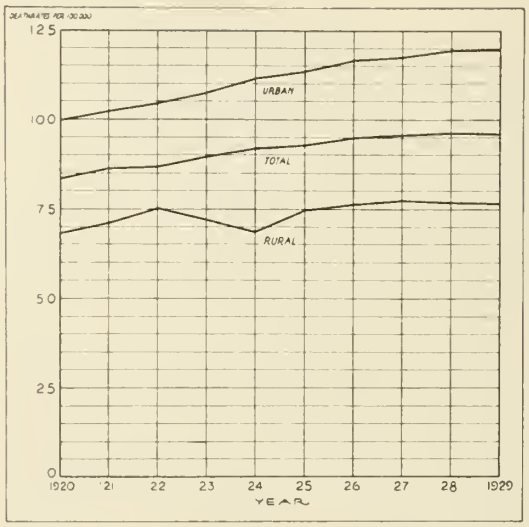


Fig. 7. Cancer death rates, urban and rural districts.

according to the above plan. They believe that from 50% to 75% of mouth cancers should get well if patients can receive thorough and skillful treatment by irradiation from the beginning.

Cancer of the pharynx, tonsils and larynx are radio-sensitive. For the treatment of these Quick, Lenz and others have made preliminary reports on a saturation technic using massive doses of high voltage x-rays, treating alternate sides every other day for from 3 to 6 weeks. This results in a blistering of the skin and a white membranous exudate over all mucous surfaces. If not more than 200 "r" is given at each dose the condition heals in from 2 to 4 weeks. Much palliation has resulted but the percentage of recoveries can not yet be estimated. Cutler is running a series of cases treated in the same manner with the radium pack.

The space allotted for this paper does not permit a detailed discussion of the less curable forms of cancer. These are cancer of the stomach and liver, cancer of the intestines and rectum—6,100 deaths from the former and 2,890 from the latter were reported in Indiana from 1928 to 1932; carcinoma and sarcoma of the genito-urinary tract; bone sarcoma; carcinoma of the bronchus and lung; lymphosarcoma; Hodgkin's disease; leukemia, and many others.

Even though the death rate from cancer in Indiana is almost twice as great as from tuberculosis, there is no cancer organization in the state or in any of the counties for the dissemination of information regarding this dread disease.

This review of the cancer problem and the Indiana situation leads to some conclusions:

1. Many patients whose lives could be saved or prolonged are dying annually because they do not have treatment during the early stage of the disease.

2. Organized medicine is directly to blame for this situation and through the state and county medical societies should continuously carry on a campaign of education of its members and the laity, especially women past the age of 30 years.

3. "The fate of the cancer patient is in the hands of the first physician whom he consults."[6] Time lost here can never be regained and always lessens the patient's chances for recovery.

4. I would urge upon the individual physician, and especially the general practitioner, the necessity for proper cancer instruction to each of his families.

5. I would urge the formation of a cancer committee in the society for the purpose of carrying on an educational campaign for early diagnosis.

313 Hume Mansur Bldg.

SIX FALL HAY FEVER SEASONS IN INDIANA*

O. C. DURHAM
NORTH CHICAGO, ILLINOIS

This paper is intended as a supplement to my "Pollen Survey of Indiana" published in The Journal in 1929.[1] The geographical distribution of hay fever plants as given in that report has been found after further investigation to be essentially correct, except that a typographical error assigned southern ragweed and marsh elder to the *southeast* part of the state, whereas these plants are found in the *southwest* part of the state. The purpose of this report is to present specific quantitative data on the pollen found in the air in Indiana. The data presented is part of that secured in my five-year nationwide atmospheric pollen studies[2] which have been made possible by the co-operation of the United States Weather Bureau.

Briefly, the method used for measuring the pollen contamination of the air consists in identifying and counting the pollen granules found on a unit area (1.80 sq. cm.) of an oil coated microscope slide which has been exposed face up for 24 hours. By this means I have obtained daily pollen figures during the fall hay fever season for six years for Indianapolis. While Chicago and Louisville are each just outside the state of Indiana, the figures from these places are of considerable importance in generalizing on the results of the study at Indianapolis.

From the evidence now in hand, the overwhelming importance of ragweed in fall hay fever in Indiana is no longer a subject of conjecture. Of the pollen found in the air in Indianapolis, during August and September ragweed constitutes 98%.

[6] Swan, John M.: The Relation of the General Practitioner to the Cancer Problem. *Bul. Amer. Soc. for Con. of Cancer*, Mar., 1934.

* From the Botanical Laboratory of Abbott Laboratories, North Chicago, Illinois.

[1] Durham, O. C.: Pollen Survey of Indiana. *Jour. Ind. St. Med. Assoc.* Vol. XXII, June, 1929, pp. 227-230.

[2] Durham, O. C.: The Pollen Content of the Air in North America. *J. Allergy*, Vol. VI, Jan., 1935; pp. 128-149.

The proportion is the same in Chicago, and in Louisville only slightly less. It must be remembered, however, that this is the proportion of pollen which is carried *in the upper air*. The slides in these three locations were all exposed more than 140 feet above the ground and more than a mile from any extensive growths of weeds. The situation presented by the figures here shown is therefore the condition encountered by hay fever sufferers living in the city rather than the exact local condition encountered by those in suburban or country areas. It is obvious that if a pollen sensitive person lives close by an extensive growth of a comparatively unimportant hay fever plant, he may inhale large amounts of the pollen of that particular plant.

Ragweeds begin to pollinate in Indiana as early as the first of August. Any hay fever symptoms occurring before this time are certainly caused by other plants than ragweed. However, the upper air does not become badly contaminated before the 10th of August. The record for one very dry year (1930) showed that the season did not really begin until the 18th of August. The onset of the ragweed season in the north end of the state occurs at about the same time as in Indianapolis, and in the southern part of the state usually three or four days later. However, in 1933, toxic concentrations of pollen appeared in Louisville as early as in Indianapolis. Excessive pollen contamination of the air has occurred in Indianapolis as early as the 18th of August and as late as the 14th of September. Only small amounts of pollen are encountered after the 25th of September. However, hay fever symptoms usually continue for several days or even weeks after the air is practically free from pollen. This may be due to direct exposure to weeds or to factors other than pollen.

Since ragweeds are found in all parts of the state, and since there are no large lakes or forested areas to interfere with pollen distribution, wind direction has very little to do with the fluctuation in the amount of pollen in the air. Usually the higher the wind velocity, the more pollen is stirred up. Strong winds blow most frequently from the southwest.

Average concentrations of ragweed pollen in Indianapolis are greater than those found in the surrounding states. The explanation of this may be that more land is under cultivation in the immediate vicinity of Indianapolis than in the vicinity of most other large cities. Even if there should be some lack of uniformity in the method of securing pollen samples, the ragweed pollen problem in Indiana is certainly as serious as in any other state.

The accompanying tables give daily ragweed figures for six years for Indianapolis, differential figures in detail for one year and in total for two years. Average figures are also given for both Chicago and Louisville. The tables should be found useful in selecting and interpreting skin tests, deciding on the correct pollens to use in treatment and in planning treatment schedules.

TABLE I

THE RAGWEED SEASON IN INDIANAPOLIS, CHICAGO AND LOUISVILLE

	Indianapolis 1928-1933							Chicago Average	Louisville Average
	1928	1929	1930	1931	1932	1933	Ave.	1929-1934	1930-1933
Aug.									
10	15	5	26	14	8	17	14	3	3
11	56	6	11	10	7	15	18	7	5
12	57	34	1	11	19	60	30	14	6
13	36	99	6	5	64	135	58	18	14
14	20	151	3	2	23	92	48	16	13
15	34	51	12	3	15	54	28	13	7
16	53	42	6	1	16	121	40	43	5
17	132	63	16	23	174	60	78	35	35
18	140	210	82	11	600	590	273	32	105
19	150	252	28	14	355	1,285	348	61	114
20	350	243	33	43	165	457	215	85	66
21	615	222	112	136	357	509	325	93	86
22	264	462	76	137	265	1,172	396	118	112
23	643	322	120	95	218	442	306	154	195
24	1,010	597	203	272	156	890	522	211	89
25	813	237	253	202	365	820	448	217	144
26	465	401	158	182	434	1,217	476	227	241
27	265	1,597	244	80	1,336	1,800	887	194	248
28	1,724	591	605	772	1,500	757	1,166	155	219
29	622	538	125	643	473	982	564	147	418
30	2,156	641	188	470	611	1,247	885	332	358
31	1,546	339	215	634	583	792	685	423	326
Sept.									
1	408	499	390	1,038	2,130	788	876	371	373
2	920	466	584	103	672	608	559	215	363
3	1,637	318	651	279	370	835	682	257	479
4	397	306	217	578	630	348	413	405	331
5	664	819	299	1,057	543	787	695	257	271
6	400	237	256	104	500	488	331	156	394
7	257	101	197	923	226	605	384	193	428
8	280	122	363	475	89	440	295	113	338
9	177	300	290	204	178	1,227	429	166	311
10	536	530	170	221	181	271	319	153	215
11	549	46	125	249	135	867	330	86	181
12	711	47	183	132	221	412	284	157	177
13	63	95	233	296	112	97	150	145	140
14	403	148	100	253	33	134	179	55	183
15	126	70	79	54	213	36	96	66	75
16	103	90	97	41	160	20	86	55	68
17	98	92	55	85	60	102	82	32	55
18	38	12	25	21	35	63	32	28	34
19	43	15	83	27	30	312	85	33	141
20	17	5	54	24	10	220	40	33	65
21	82	1	49	26	70	15	26	21	35
22	37	2	23	29	25	43	12	5	28
23	27	2	11	8	10	16	12	11	20
24	23	7	7	1	15	18	12	11	14
25	30	.....	6	3	10	20	25	12	21
26	3	....	40	2	..	105	3	13	30
27	3	.....	5	...	3	8	1	3	7
28	.	1	.....	...	5	1	1	3	1
29	..	...	.	5	..	2	1	1	0
30	.	5	...				1	1	1
Totals	19,198	11,439	7,115	9,998	14,409	22,402	14,093	5,681	7,492

TABLE II

PROPORTION OF VARIOUS FALL POLLENS FOUND IN THE AIR IN INDIANAPOLIS, CHICAGO AND LOUISVILLE

		Ragweed	Chenopod and Amaranth	Grass	Corn	Hemp	Annual Sage	Composite	Miscellaneous
Indianapolis 1932-'33	Average Totals	18,405	164	116	4	5	22	10	34
	Percent	98%	1%	1%	..	...	.		..
Chicago 1932-'34	Average Totals	7,298	157	26	2	1	.	3	15
	Percent	98%	2%	..	.	..	.	...	...
Louisville 1932-'33	Average Totals	7,339	143	85	..	..	76	9	59
	Percent	95%	2%	1%	..	....	1%	..	1%

TABLE III
REPORT OF ATMOSPHERIC POLLENS FOUND ON INDIANAPOLIS SLIDES EXPOSED ON COMMERCIAL BUILDING—194 FT. ABOVE STREET

AREAS OF SLIDE COUNTED—1.8 Sq. Cm.

1933	Ragweed	Chenopod and Amaranth	Grass	Corn	Hemp	Annual Sage	Composite	Miscellaneous
Aug.								
10	17	3	2		1			3
11	15	2	1		1			2
12	60	18	5	3	5			
13	135	17	6		2			1
14	92	1	3	1				
15	54	4	2					
16	121	3	1					
17	60	5			1	3		
18	590	5						
19	1,285	15		1				
20	457							
21	509	1						
22	1,172	2						
23	442	1	1	1				
24	890	5	9	1				
25	820		8					
26	1,217	6						
27	1,800							
28	757							
29	982							
30	1,247	2	5			2	1	4
31	792		2					2
Sept.								
1	788	5	2					
2	608	1	1					1
3	835	2	2					2
4	348	2						1
5	787	5	3					
6	488	3	2					
7	605		2					
8	440	3	4					
9	1,227	5	1			1		16
10	271	3	2					
11	867	15	12			2		
12	412	3	2					
13	97							
14	134							
15	36							
16	20							
17	102	2	9			3	1	2
18	63	7	4			1	1	1
19	312	2						
20	220	12	8				1	
21	15						5	
22	43	1				1	1	
23	16	6	3					1
24	18	10	5			4		
25	20	4	1			4		
26	105							
27	8	2						
28	1							
29	2	2				2	1	
30								
Total: Aug. and Sept. 1933	22,402	185	108	7	10	23	11	36
Total: Aug. and Sept. 1932	14,409	142	125			22	10	31
Average percent of Grand Total	98	1	1					

PELVIC VARICOSITIES*

JUSTICE F. WYNN, M. D.
EVANSVILLE

Since first observing pelvic varicocele, tubo-ovarian varicocele, or varicocele of the broad ligaments, I have been interested in this rather frequent condition found in pelvic surgery. A survey of the literature on this subject reveals three important points: namely, that there is a striking paucity of written material; that the articles show a rather pronounced similarity; and that the results both from the medical and surgical standpoint are rather unsatisfactory.

Richet in 1854 was the first to describe the anatomy of the pelvic veins and later to call attention to the varicosities of the tubo-ovarian region.

Brinton of Philadelphia was the first in America to describe the ovarian veins, demonstrating a valve on the right and bringing out the fact that there are usually two veins on either side. On the left they enter the renal vein at a right angle to the vein, while on the right side they empty into the inferior vena cava at an acute angle. At this entrance is a valve which prevents the blood from flowing back into the pelvis. These points will be referred to later. Until 1905 there were only thirty-five cases reported in the medical literature, and since then only half as many have been found in print.

Castano[1] in Argentina began a study of pelvic varicocele in 1913, and made important contributions to literature on the symptoms, diagnosis and treatment. His conclusions that all the cases had pelvic congestion were true, but that these congestions were due to syphilis has been definitely disproved by our modern facilities, such as the Wassermann, Kahn, Klein, and Hinton tests on the blood and spinal fluid.

The pelvic veins are no different than other veins in structure, but the valves are scarce and the supportive framework is rather unstable. This is a good reason for the veins becoming tortuous.

I corresponded with over twenty-five of the leading gynecic surgeons both in the United States and Canada asking each one what his experience had been in the symptomatology and treatment of pelvic varicosities. The answers received were surprising and enlightening. Less than half of these men thought of varicosities as causing any symptoms of importance, while the majority was inclined to believe that many of the inexplicable pelvic miseries were due to broad ligament vascular engorgement.

Most writers are of the opinion that the varicosities are worse on the left side than on the right, and cite as the reason the fact that the veins on this side enter the renal vein at right angles and that no valves are present. In studying more than a hundred cases of broad ligament varicosities, I have found more and larger veins on the right side at operation. In an article published about two years ago I held the opinion that the vermiform appendix might have something to do with this, but after some extensive investigation I have discredited my belief and have now come to the conclusion that pregnancy is the main cause.

We know that pregnancy or multi-pregnancies from the etiological standpoint are the most common cause of pelvic varicocele. We also know that when the uterus rises out of the pelvis it deviates

* Presented before the Surgical Section of the Indiana State Medical Association at the Indianapolis session, October 10, 1934.

[1] Castano, Carlos A. Pelvic Varicocele. *Surg., Gyn., and Obs.* 40:2, 237-243, February, 1925.

in most cases to the right and lies more on the right side than on the left due to the spinal column. This is particularly true when the patient is lying down, at which time the veins should empty themselves better. It is my belief that this pressure and the relaxation of the broad ligaments produce the more and larger veins on the right side. Involution usually takes place with the uterus on the right but it is done somewhat quickly and probably does not enter the picture. Large tumors of the uterus or tumors on the right side produce more varicosities on this side. To further substantiate this point, Emge[2] of San Francisco published an article in which he stated that there were three to one more varicosities on the right than on the left, and that the proportion of pain on this side was in the ratio of seven to two. He further states that there are seven to one more symptoms coming from the right than from the left when they were unilateral. Of course in many cases the symptoms are bilateral, but they are usually more prominent on one side, and when this is so, it is usually the right.

Where there had been neither pregnancies nor tumors and varicocele was present, it was found to be worse on the left side, as varicocele is in the male. This is explained by the ovarian vein entering at right angles to the renal vein and no valves being present.

There are no symptoms peculiar to this pathological entity. Castano says that dyspareunia, "erotic pain," dysmenorrhea, and watery leucorrhea are present in this condition. The symptoms may be few or many depending on the etiology. Probably the most common are backache and heavy feeling in the pelvis. The patient tires easily and is of the hysterical type. There is usually constipation, headache, dysuria, malaise, weakness, lassitude, inability to sleep, and pain radiating to the legs or upward towards the kidneys.

Other points that are important in diagnosis are the finding of varicosities in the legs or the vulva or both. A negative bimanual examination in which only tenderness is found is also a clue to the condition present.

The diagnosis is never positively made before operation but usually after opening the belly. The veins may contain phleboliths that can usually be felt or which the x-ray film may often reveal. Patients seem to be more tender on vaginal examination while standing than when in the lithotomy position, but I am unable to do a satisfactory bimanual in this position due to the tenseness of the abdominal muscles, even though most all the articles advise this form of examination. I can not be sure whether I am feeling a full intestine or a wad of omentum instead of the wormy mass of veins. Some authorities say the veins are only distended when the patient is standing, but again this has been disproved by finding the veins distended at operation when the patient is in the Trendelenburg position.

Several of the men to whom I wrote suggested that tampons anointed with different forms of ointments and solutions would give relief, though in most cases these were only temporary. Pessaries of all types were not recommended because it seems that something besides a mechanical support is required. Thus, suspension of the uterus alone would not give relief.

Practically all were agreed that surgery offered the only chance for a complete cure. Some of these men were so radical as to remove both ovaries and cut away the upper part of the uterus. All were agreed that removal or the tying-off of the veins alone would accomplish nothing of a permanency.

As to my treatment, I remove the tubes in every case, for if they are examined, one will almost invariably find cysts ranging from the size of a pin head to that of an English walnut either on the tube or very near the Fallopian end. Of course, if any other pathology is present it is also remedied and the uterus is brought forward and suspended. Most of the enlarged ovaries associated with this condition will give no further trouble after this, and many will regress in size. I always anchor the ovary to some stable structure, preferably the round ligament. Furthermore, the ovarian tissue should not be destroyed on account of the "nervousness" of the woman. Again, pregnancy, the most common cause, can not be repeated with the tubes out. As to ligating or removing the veins, I have been very dissatisfied with the results, and the cutting of veins is bloody and "messy."

Injection of the veins with the ordinary substances that are in vogue seems to me to be dangerous, because of a possible embolism resulting from it, although this might be done in Castano's operation in which the ovarian veins are tied off and resected close to their entrance into the larger veins. As to cutting out the pelvic nerve or the so-called plexus of Hovelacque for relief in this condition, I have not done it for this type of pathology, having performed it only on account of painful menses.

CONCLUSIONS

1. Very little original work has been done on this subject.

2. Pregnancy is the most common cause of pelvic varicocele.

3. The gynecic authorities are not agreed as to the best type of treatment to render.

4. Contrary to popular opinion, varicosities are worse on the right side and produce more symptoms on this side than on the left.

5. Removing the tubes and remedying all pathology present without resecting or tying off the veins will in most cases produce satisfactory results.

905 Central Union Bank Building.

[2] Emge, Ludwig A. Surgical Treatment of Varicose Veins of the Female Pelvis. *J. A. M. A.* 85:1690, November, 1925.

THE NERVOUS PATIENT*

O. A. TURNER, M. D.
MADISON

The above title conveys to the mind of the general practitioner of medicine a definite idea, one usually unpleasant and unattractive. When, at his first visit, the patient describes numerous detailed symptoms, referred to many organs and functions of the body, which can not be explained by the objective findings, the doctor has an unhappy premonition that this is a "nervous" or "neurotic" case. In spite of previous treatments and possibly operations by other physicians and perhaps treatment by the chiropractor, also, there is no improvement. Often, indeed, new symptoms and ailments have been acquired from this liberal medical education. The newly chosen medical attendant, while honestly anxious to cure or alleviate, is uncomfortably conscious of the limitations of his ability to do so.

Modern medicine deserves the name because of its remarkable developments in x-ray, bacteriologic, and chemical diagnosis, thorough physicial examination, careful history-taking, and patient observation. When such a thorough "mechanistic" procedure fails to reveal definite etiology or pathology, we hesitate to admit the absence of organic disease feeling that there must be some obscure focal infection, some "toxemia," or some indefinite endocrine or metabolic disturbance. Many failures in diagnosis result in our "nervous patients" because, in our eager search for somatic disease, we forget the inseparable relation of mind and body. The physical symptoms and dysfunctions arising from mental states are usually termed "functional" but the term "psychogenic" is more accurate. The structural relationship of mind and body is shown by the fact that the mind has conscious control of the body in relation to its environment through the central nervous system which, as Wechsler[1] expresses it, "is intimately bound up with the vegetative nervous system and has reciprocal relationship with the glands of internal secretion."

Disturbance of the function of the mind known as the affective or emotional state is the principal factor in the psychogensis of disease. In animals, as was the case in primitive man, the emotions are simple, as fear of its enemies and pleasure in satisfying its hunger for food. In civilized man the emotions, although extremely complex, are essentially either painful or pleasureable. Fear of disease or of poverty, failure and disappointment, or unsatisfactory social and family relationships threaten his pleasure and security; while success and happy social and family relationships add to his sense of well being. The personality of the individual is determined by a multitude of such emotions with the impulses and reactions resulting. In a discussion of the biologic purposes of these emotional manifestations Darmstadter[2] gives this graphic explanation: "In the presence of danger (in animals) there is an impulse to fight or flight. In the associated emotion of fear the circulation and respiration are speeded, the blood pressure is elevated, the neuro-muscular mechanism is on edge with muscles tense and ready. . . . Indeed there is a temporary subservience of all functions to that of motor action. . . . Thus the palpitation, dyspnea, tremor, pallor, tenseness, peristaltic arrest, dry mouth, and so forth, which characterize fear are of utilitarian origin." Many physiologic phenomena arising from mental states are familiar, such as blushing and dryness of the throat from embarrassment, tremor and tachycardia from a dreaded visit to the doctor, or arrest of digestion from some suddenly alarming incident. Such manifestations have been demonstrated to result from stimulation of the adrenal gland through the sympathetic nervous system.

While civilized man is not ordinarily subject to fear of extreme injury or destruction, this emotion in varying forms has acquired greater persistence and complexity. Not only is the individual subject to multitudinous emotions, pleasureable and painful, but his mind, conscious and unconscious, is the scene for unending conflicts between three forces: (1) His deepseated instincts and impulses, racial and hereditary, including the sexual instinct; (2) His own higher sense of moral values and ideals; (3) The demands of his family and social environment. In infancy he is protected and his needs supplied, but as he grows older he must secure for himself what he requires. He wavers between physical desire and moral duty; between ambition for success and a sense of inferiority born of many failures; between his own higher ideals and the demands of society.

The neuroses and psychoneuroses result from inability to make a proper adjustment of the emotional conflicts arising from difficult situations. There is an attempt to repress these conflicts in the unconscious mind where internal conflict takes place. Both the psychic and somatic symptoms thus represent a compromise or unsuccessful attempt at adjustment of this conflict in the unconscious. Freud's theory or the psychoanalytic theory is discredited by many because of the asserted undue emphasis of sexual trauma in childhood as an etiologic factor. From this theory, however, has developed psychoanalysis which has been of great diagnostic and therapeutic value. It must be admitted that sex, in which Freud includes all the various evidences of love and affection, is the most frequent factor in the development of the neuroses because it is, although the most dominant, the most repressed instinct in our social life.

* Presented before the Medical Section of the Indiana State Medical Association at the Indianapolis session, October, 1934.

[1] Wechsler, I. S.: The Psychoneuroses. Nelson Loose Leaf Living Medicine. 6: 658, 690.

[2] Darmstadter, H. J.: Neurasthenia as a Manifestation of Emotional Disturbances, *Amer. Jour. Med. Sci.* 181: 326. (March), 1931.

Let us consider some of the neuroses and psychoneuroses in regard to their physical manifestations. Anxiety neurosis characterized by fear and anxiety is the most common. As Appel[3] states, "If the anxiety is expressed by the sympathetic nervous system, there is anxiety neurosis." There is a persistent indefinite apprehension or dread as of disease, of some unknown impending disaster, or of insanity. The symptoms have been summarized as follows[4]: "Numerous physical symptoms which may be regarded as the bodily accompaniments of fear, particularly cardiac and vasomotor disturbances; the heart's action is increased; often there is irregularity and palpitation; there may be sweating, nausea, vomiting, diarrhea, suffocative feelings, dizziness, trembling, shaking, and difficulty in locomotion. Fluctuations occur in the intensity of the symptoms, the acute exacerbations constituting the 'anxiety attack'."

The diagnosis of neurasthenia should be limited to those cases showing abnormal fatigability and irritability. The emotion of anxiety here results from a prolonged state of indecision and conflict, often with a mood of discouragement and frustration from repeated failures. The fatigue reaction is based on the distaste for a certain activity or duty and the indecision or fear to attempt it. There are auto-erotic factors also, a desire for care and sympathy from others, and an expenditure of interest on the somatic sensations and functions. Physical symptoms are: hyperaesthesias to sensations of pain, vertigo sometimes, pressure in the head, pain in the back, visceral neuralgias often referred to the sexual organs, and such weakness and fatigue that there is complete disability to do any form of work. Probably cardiac neurosis, or neuro-circulatory asthenia and gastric neurosis or "nervous indigestion" should be regarded as forms of neurasthenia.

Appel[3], whom we quoted above, states "If the anxiety is converted into some form of motor innervation mediated by the central nervous system, striated muscles, and sense organs, conversion hysteria is the rule." Thus hysteria produces motor or sensory disturbances and may, as has been frequently said, simulate any symptom or disease. It is impossible here to enumerate all these manifestations. Osler[5] outlines them as: Convulsive types with minor and major forms: Nonconvulsive with paralyses, contractures and spasms, disorders of sensation, visceral manifestations of respiratory, cardiovascular, and digestive systems, joint affections and mental symptoms. Here repressed wishes and conflicts in the unconscious mind are converted into bodily symptoms which represent an attempt at compromise or adjustment. The most characteristic feature of hysteria is suggestibility. In every individual even if not neurotic both hetero- and auto-suggestion have a remarkable influence. The question of traumatic neurosis which presents many symptoms similar to other types is of frequent interest. Wechsler[4] who classifies it as a traumatic hysteria describes it thus: "The accident merely plays into the hands of a suggestible neurotic individual who cannot resolve familial, marital or sexual, and other personal conflicts on the basis of reality and finds in the trauma a thankful occasion." Also varying degrees of self-pity and autoeroticism with desire for sympathy and attention enter into this.

The etiology of the neurosis and psychoneurosis is based almost entirely on a constitutional weakness or inherent defect of vitality of the nervous system caused by heredity or environment. Many of these patients have a neuropathic or psychotic heredity. As little can be done at present to control heredity, our attempts at prevention must be directed against environmental influences. In children raised by neuropathic parents we have an unfortunate combination of both of these factors. Mental hygiene, the most important recent development of modern medicine, endeavors not only to correct faulty environment but also in a positive way to build up mental courage, strength, and endurance. The study of behavior disorders in children is of extreme value in prevention because a large part of these emotional defects are originated or made worse by improper care and training during this developmental period.

For the diagnosis of the neuroses is required: (1) A thorough physical examination with the aid of all needed diagnostic methods; (2) A complete history with proper emphasis on the problems affecting the emotional life and personality. That is we must study the patient as a whole. Whether the objective evidences of disease explain all the symptoms present must be considered. We must remember that the neuroses occur with and influence greatly the etiology and prognosis of many organic diseases as: heart disease, gastro-intestinal disease, tuberculosis, hyperthyroidism, and hypertension. Often, as for example in organic heart disease, the fear and apprehension may be quite as difficult to manage as the disease itself. When a neurosis is suspected to be the sole cause of illness after middle age, diseases of the kidney, heart and lungs, diabetes, high blood pressure, cerebral arteriosclerosis, general paresis, cancer or tuberculosis must be carefully excluded. The general practitioner sees many "neurotic" patients with symptoms of a mild type which may be evident only after unusually severe emotional stresses. Recognition of such cases gives a much better prognosis for cure or relief. The differential diagnosis of psychoneuroses and psychoses which can not be discussed here is of extreme importance. It must be kept in mind that nervous conditions similar to the neuroses may arise from physical causes

[3] Appel, K. E.: Psychoanalysis: *The Cyclopedia of Medicine*, F. A. Davis Co., 1934, 10: 507.

[4] Manual for Medical Examiners, U. S. Veterans Bureau, 1930, 66.

[5] Osler and McCrae, Practice of Medicine 10th Ed., D. Appleton and Co.: Hysteria, pp. 1124-1129.

alone. Thus in "toxic neurasthenia," which is not a neurosis at all, but the result of prolonged overwork with fatigue, of exhausting illness as influenza, or of the toxemia of focal infection, many symptoms typical of true neurasthenia are present. Here we have no recurrences as is common in the neuroses, and appropriate treatment results in satisfactory recovery. This demonstrates again the intimate relation between mind and body. However, where disability is unduly prolonged after an acute illness we must inquire as to neurotic factors such as the desire for care or attention or the avoidance of dreaded duties.

The average general practitioner of today is unfortunately not trained in neuropsychiatry and is not fully familiar with the importance of psychogenic influences in disease due to the fact that the teaching of these subjects in our medical schools has been inadequate. Ebaugh[6] in a study of 60 medical schools in 1932 found adequate teaching in psychiatry in only 16 (he adds that in 10 more satisfactory teaching would soon be developed). The frequency of psychogenic factors in illness is shown by the observations of many clinicians. Weiss[7] in a study of 100 consecutive private patients places 30 in a group in whom the illness seemed to depend entirely on emotional problems, 37 in a group in whom the illness seemed to depend in part on emotional problems, and 33 in a group in whom emotional problems did not seem to enter into the cause of the illness. He quotes Moersch as reporting that in a group of 500 consecutive patients at the Mayo foundation there were psychogenic factors of varying degree in 44 per cent. Miller[8] in a study of 2,172 consecutive cases with indigestion admitted to a gastro-intestinal clinic states that the percentage of gastric and colonic cases that were functional was 24.2 and adds that in his private practice more than 40 per cent of those with the symptoms of indigestion were functional. Gillespie[9] remarks that a well known consultant has stated that anxiety neurosis is one of the six most frequent diagnoses made by him.

In the management of the neurotic patient all foci of infection, endocrine or metabolic disorders, and organic disease must have adequate treatment. Proper symptomatic treatment for the nervous condition as feeding, physiotherapy and hydro-therapy, rest and drugs are indicated. The full confidence of the patient is essential for any attempt at psychotherapy. The patient's conviction that the doctor is thoroughly familiar with his condition contributes greatly to this. Then the emotional or personality problems and their influence in their etiological relationship must be explained to him. Suggestion, persuasion and encouragement are used to aid him in making a readjustment. Many individuals are attempting to assume work and responsibility for which they are constitutionally inadequate. Tact and care are necessary to avoid suggesting new symptoms and ailments. In the severe psychoneuroses, psychoanalysis by one who has proper training and experience is required. In conclusion let us realize that these neurotic patients are entitled to due consideration and sympathy because their symptoms indicate an attempt, however unsuccessful it may be, at compromise or adjustment. They are attempting to meet their personal, family and social problems with such courage and capability as they possess.

[6] Ebaugh, F. G.: The Crisis in Psychiatric Education. *Jour. Amer. Med. Assn.* 99: 707, (August 27), 1932.

[7] Weiss, Edw.: Personality Study and the Practice of Medicine, Med. Clinic N. A. 17: 705, (November), 1933.

[8] Miller, T. G.: The Diagnosis and Treatment of the Common Causes of Indigestion, Med. Clinic N. A., 18: 87, (July), 1934.

[9] Gillespie, R. D.: Psychotherapy in General Practice. *Lancet* 1: 1, (January 7), 1933.

HERNIA THROUGH EPIPLOIC FORAMEN*

Case Report

R. B. SMALLWOOD, M. D.
BEDFORD

This subject is presented to call your attention to the fact that internal strangulations do sometimes occur, and may be the cause of grave illness and oftentimes death.

The case I am presenting is one that was of great interest to me because it was unusual and autopsy was obtained.

Reports in all literature show about 150 cases reported. A summary of these cases gives a history of pain in the epigastrium (not severe but of a light, colicky character) light enough that sleep may at times be obtained without the use of opiates. Vomiting, which is always a constant symptom, may come on several hours after the pain although the obstruction is high up. Bowel movements are not obtained, but occasionally there is emptying of the lower bowel even as long as two days after obstruction. There is usually a mass in the left upper quadrant of the abdomen and the patient looks ill. Rigidity of the abdomen is not a constant symptom. The pulse rate rises rapidly, the temperature is not at all constant, may be and usually is below normal at the onset of the symptoms, but may rise later. Diagnosis is hard to make and one frequently has to be courageous and operate even a few days following a previous serious operation.

CASE REPORT

Mrs. R. Q., age 21, came to me about the twentieth of January complaining of vomiting and of having missed a monthly period. About eight weeks earlier she had had a normal menstruation. She had not felt well for about two years, had lost some weight, and in general, her health had been poor. Six months before my examination she had had a criminal abortion performed at which time she was

*Presented before Surgical Section of the Indiana State Medical Association at the Indianapolis session, October, 1934.

about three months pregnant. Following this abortion she was acutely ill, her temperature rose to 103, and her recovery was somewhat stormy. As an infant she had had some trouble with her right leg and as a result there was ankylosis of the right hip joint. Six years previously she had been operated on for a bowel obstruction at which time some four feet of bowel were removed. Whether this was large bowel or small bowel she could not state. The cause of the bowel obstruction was not known, but the appendix was removed at that time.

Menstrual History: Began menstruating at fourteen. Periods regular, recurring every twenty-eight days, lasting four days. Before and during menstruation she had severe cramps and discomfort, requiring morphine at times.

HISTORY

Family History: Negative for any inherited diseases or any relevant history.

Marital History: Had been married eight months. Husband refused to help his wife in contraception. Because the patient had tuberculosis and had been advised to be aborted because of a minor pelvis, they came to me requesting abortion and sterilization.

My examination revealed a thin woman about twenty-one years of age, twenty pounds underweight, with a loss of six pounds in weight during the past six weeks; temperature 99.6; head normal; chest showed scars of early tuberculosis with some rales at the right apex; the right hip was ankylosed; there was some apparent shortening with two and one-half inches actual shortening. All other organs were normal as was the urine test. The Wassermann was negative.

PELVIMETRY

Intercrestal measurements, twenty centimeters. Interspinous measurements, twenty-four centimeters. External conjugate, fourteen centimeters. Bi-ischial, eight and one-half centimeters. Internal conjugate not measured but with finger tip; examination found it to be inadequate. Examination of the pelvis showed a soft, boggy cervix with discoloration. The uterus was anteverted and enlarged. The soft cervix and firm fundus helped to diagnose pregnancy. The pelvis was inadequate to deliver a full term fetus.

Since my examination showed that the woman would be unable to deliver at term, and also that she apparently was tuberculous, I considered a therapeutic abortion and asked her to see two other physicians for their opinions. Both consultants advised therapeutic abortion, and operation was decided upon.

OPERATION

On February 1, under ether anesthesia, the abdomen was opened with a mid-line incision from the umbilicus to one-half inch above the symphysis pubis. On examination of the abdominal contents it was found that there was present a large mass of adhesions involving the large bowel. The tubes were free and not inflamed. Both ovaries were present, with a few small benign cysts. The appendix was absent. Examination of both kidneys revealed no palpable defects. Both tubes were removed; the abdominal incision was closed. Effort was made to place the woman in stirrups for curettage, but because of the ankylosis of the right hip, the right thigh obstructed the introitus.

All that could be done was to visualize the cervix uteri. With a long pair of forceps the cervix was dilated as well as possible and sterile gauze was placed in the cervix. She was returned to her room and her condition was good.

Progress and Notes: First day after admission, temperature rose slightly, there were some cramps, and a small amount of flow. At the end of forty-eight hours, the temperature had risen to 101.4, pulse 120. Since the packing had not passed, nor were there any cramps, two minims of pituitrin were given for four doses, then a dose of castor oil; this was followed by some bleeding. The next day the packing had slipped down, and was removed, but there was no fetus or placental tissue and so more pituitrin was given, three minims every thirty minutes for three doses. There was passage of some clots at this time but no fetus. Seventy-two hours after operation, two minims of pituitrin were given every fifteen minutes until five doses were given; some clots passed but no fetus. There was a large bowel movement at this time without physic.

On the fourth day after admission, the pituitrin was repeated, two minims every fifteen minutes with one-half c.c. as a fifth dose. She had some hard pains and some bleeding, but no fetus. On this day her temperature rose to 101, pulse 98.

On the sixth day after admission, she was returned to surgery, placed on her right side, draped from the back, and an attempt was made to pack the uterus. Because of the position of the right thigh, I was again unable to introduce a curette. Packing was placed in the cervix, and she was returned to the room. Her condition was good, pulse 100. She was on the table only twenty minutes. She awakened this time having hard pains, feeling very uncomfortable, and vomiting some green fluid. She continued to have pain throughout the night, with very hard pains every seven or eight minutes. These pains became closer, every four or five minutes, were very hard, and she was nauseated.

On the seventh day after admission, early in the morning, she pulled out the packing herself. There was no bleeding, but the patient was much quieter. Her temperature rose to 101.8 rectally; her pulse was not good. She was very nauseated. Saline with glucose was given subcutaneously. Her pulse at one time was 128.

On the eighth day after admission, pulse was 120, temperature 100.8. Her condition did not seem

good. She was vomiting and had some distention, so a soap-suds enema was given which was returned with a small amount of fecal matter and some flatus. This enema was repeated four hours later and gave excellent results; her distention was relieved but she continued to vomit. On consultation it was decided that there was no obstruction since there had been such excellent results from the enema. Her vomiting continued through the night. She was given normal saline with glucose following which she slept very well; temperature was 99, pulse 98.

On the ninth day after admission, she vomited, and was given an enema which was returned highly colored with some fecal material. Pituitrin was again given for three doses and on the night of the ninth day her temperature was 99.2, pulse 118; she was vomiting some brown fluid and was very uncomfortable. Early that morning 1000 c.c. of saline with glucose was given. Her condition was fair and she was advised to return to surgery. With the patient on her right side and face, a specially curved curette and dilator was used, the cervix was dilated, and as the curette was introduced about ten ounces of foul-smelling brown fluid passed out, and some placental tissue was removed. The curette was re-introduced and it passed too far into the uterus. It was removed with a loop of bowel. On examination of this bowel it was found to be small intestine which was stripped of its peritoneal covering.

The patient was changed from her right side and face to the back and the abdomen opened through the old incision. The omental sac at its lower end was adhered to the posterior surface of the fundus of the uterus. After this was removed, the loop of bowel which had been pulled into the vagina was brought into the abdomen. This dead bowel began about one foot from the caecum and was stripped upward from its peritoneal covering for about fifteen feet where it was lost in the mass of adhesions. As it was stripped there was no bleeding. Since we could not follow the dead small intestine to a viable portion, it was cut, and tubes placed into the abdomen for drainage of the digestive enzymes. The family was informed of the imminence of death. She revived, became conscious, complained of severe burning in the abdomen, and died twelve hours after the last operation.

ABSTRACT OF AUTOPSY

All of the large bowel was involved in a mass of adhesions. There were three feet of small bowel found distal to the duodenum of which about one foot is necrotic. The end of the small bowel was not attached, lying free in the abdomen. The foramen of Winslow was as large as a half dollar. Lying within the lesser omental cavity was part of the mesentery of the small intestine. The visceral peritoneum from which the intestine had been removed was necrotic. There was a passive congestion with some necrosis of this mesentery. The mesentery of the small intestine was not continuous with the mesentery of the large intestine. Within the mesentery of the large intestine were numerous calcified glands from the size of a pea to the size of an olive. Both ovaries were present, both tubes were absent; there was a necrotic area three centimeters in diameter on the posterior surface of the fundus of the uterus. There was no appendix.

CONCLUSION

This patient had a hernia of the small intestine through the foramen of Winslow, healed tuberculosis of both lungs, healed tuberculosis of the right hip bone, and healed tuberculosis of the peritoneum.

NOTES

Hernia through the foramen of Winslow is very rare, between 140 and 150 cases having been reported in the literature. Of these cases about seventy per cent have been of the small intestine of which fifteen per cent have been with an anomalous mesentery, i. e., mesentery of the small and large intestine continuous. In this case the mesentery was of the normal type. The cause of the small bowel entering the foramen of Winslow is not known, but to my mind was due to the use of pituitary extract.

A point of great interest to me is that with the high strangulations there was practically no vomiting. The extreme pain in the abdomen must be considered as a point in favor of internal strangulations. I feel that had this patient been operated twenty-four to forty-eight hours earlier, or at the time of consultation, she would be alive. The relief of the pain after a period of time, I believe, was due to a paralysis of nerves of the bowel caused by the pressure of the strangulations. Relief of pain should not keep one from making his diagnosis. I believe the reason that the mass was not noted in the left epigastrium, as is found so often in these cases, was that the adhesions of the large intestine made a bulky mass which was pushed to the opposite side after the small intestine entered the foramen. Internal strangulations are not at all the uncommon thing the doctor would believe. There happens in the practice of the general man cases which are not recognized, and because the physician lacks knowledge of such things, they are not operated on and, as in this case, die.

I believe that we can apply prevention at this point and can be most conservative by being radical.

I repeat that the reason for this paper is to call to your attention the fact that internal strangulations can happen to the general practitioner and especially to the general surgeon. Early diagnosis is fundamental, and courageous decision important.

DISCUSSION

John R. Phillips, M. D. (Michigan City): The case presented is very interesting and calls to our attention the fact that internal hernias which per-

sist to strangulation and obstruction will in all probability prove fatal to the patient.

I have jotted down a few places where hernia might occur to refresh your memory: diaphragmatic hernia, in the mesentery, in the transverse mesocolon, in the fossa above the duodenum and above the cecum, in the periduodenal fossae, and the sigmoid fossa.

Dr. Smallwood mentions that pituitrin might have been one reason for the production of this strangulation. I might mention that we give many of our patients pitressin postoperatively to prevent ileus, and I wonder if that had been used if he might have gotten the same result.

In the clinical findings as set forth by Brown and Rowntree, following obstruction, we find evidences of dehydration, shock and uremia. The laboratory findings will be of some help. The leukocytosis will vary from 15,000 to 30,000, they will have a high urea count, and increased alkalinity in the blood.

I might mention, in passing, that Dr. Trusler and Dr. Gatch were forerunners, along with Hayden, in treating obstruction by giving chlorides. Of course in cases where it was suspected we would probably follow with plenty of salt solution. A procedure used at the Presbyterian Hospital in Chicago is the administration of an antitoxin made from Bacillus Welchii, with the idea that the distention is produced by this gas-forming bacillus.

ABSTRACTS

RECTAL GONORRHEA IN WOMEN

Clement L. Martin, Chicago (*Journal A. M. A.*, Jan. 19, 1935), points out the fact that rectal gonorrhea, especially in women, is a more frequent complication of genital gonorrhea than is generally known. The chief reason why it is regarded as rare is that it is often overlooked. The conception that the infection usually causes a severe rectal inflammation is not true; anal ulcer, rhagades or condylomas are not common concomitants. Perhaps too many students and physicians have obtained their present notions of rectal gonorrhea from the free clinic or hospital dispensary, where Negroes are treated and where proctitis obliterans patients are seen and the probable relation of gonorrhea to the stricture has been stressed. In 111 cases, three presented superficial fissures; perianal suppurative disease was found in three cases; two presented fistulas and one a short sinus communicating with an inflamed fibrosed crypt. In four patients the mucosa of the terminal rectum had a nodular surface; i. e., the early polypoid change that results from chronic mucosal infection. Superficial erosions, in small spots from 1 to 2 mm. in diameter were observed, on the mucosa just above its junction with the skin in four instances. No rectal or anal ulcers were encountered although a number of these cases were examined with the proctoscope very early in the course of their genital and rectal infections, the very severe cases described by some writers were not observed. Some of the women had much discomfort, especially at defecation, but not many, and the anorectal inflammation was not uniformly proportionate to the complaint of the patients. Stühmer has described four phases of the disease. Only the last two usually are seen. In the first phase the mucosa is swollen and fiery red, the mucosal folds are obliterated, the lumen is quite filled with swollen mucosa, and the central orifice is square, irregular or arch shaped. The mucosa bleeds easily and on it there is greenish yellow mucopus. The anus is reddened and very sore. In the second phase the swollen redundant mucosa recedes, the normally arched lumen reappears, the redness lessens, seedlike swellings, the color of the adjacent mucosa, are seen, the pus becomes thicker and does not adhere to the wall, and inflammation still is present in the anus. The third phase appears after one or two days; this is the proctoscopic picture commonly seen. There is considerable swelling and redness of the mucosa; the seeded appearance still is generally present, and thread-like pus, is noted, which is quite adherent to the intestinal wall. The fourth phase is characterized by the persistence of pus on the normal mucosa. Routine rectal smears should be made of all women who exhibit a gonococcic infection of the urethra or the cervix.

COMPARISON OF THREE ELECTRICAL METHODS OF PRODUCING ARTIFICIAL HYPERTHERMIA

Since January 1930, Francis W. Bishop, Emmy Lehman and Stafford L. Warren, Rochester, N. Y. (*Journal A. M. A.*, March 16, 1935), gave 448 treatments to 312 patients. The diathermy method was used for 157 treatments, the radiotherm for twelve treatments and the radiant energy method for 279 treatments. Three of these patients were treated with both the radiotherm and diathermy, with an interval of from one to three weeks between. Since the results seem to be identical, no matter what the method of elevating the temperature may be, a comparison may be based on cost and ease of use. While any of the electrical methods can be made to work efficiently and safely in artificial hyperthermia, the radiant energy (infrared) method seems to be the most convenient and economical method in the authors' experience. There does not appear to be any difference in the clinical effects and results from the various methods used. These methods rely on the circulation of the blood for the redistribution of heat in the body from the site of application of the energy. The simplicity of the equipment in using radiant energy enables one to administer to the comfort of the patient somewhat, such as by changes in position, pillows and rubber rings and to foresee and handle sudden changes in condition. The cost entails the building of a suitable cabinet wired for the lamps and the purchase of a rheostat. The usual thermometers, blood pressure equipment, oxygen tank and records complete the equipment. A constant indication of the rectal temperature aids greatly in manipulating the heat input to maintain the rectal temperature at a desired level.

☆

IT HAS BEEN SAID that a physician's education is never completed.

INDIANA UNIVERSITY School of Medicine announces its Annual Post-Graduate Course in this issue.

See pages xix and xxxiv.

THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION
DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

Office of Publication: 1021 Hume Mansur Bldg., Indianapolis.
Editor: E. M. SHANKLIN, M. D., 5141 Hohman Avenue, Hammond, Ind.
Managing Editor: THOMAS A. HENDRICKS, 1021 Hume Mansur Building, Indianapolis

Editorial Board:
F. T. ROMBERGER, M. D., Lafayette.
T. B. RICE, M. D., Indianapolis.
PIERCE MACKENZIE, M. D., Evansville.
L. P. HARSHMAN, M. D., Fort Wayne.
ERNEST RUPEL, M. D., Indianapolis.

APRIL, 1935

EDITORIALS

THE DANGEROUS AGE

The first few days of life, especially the first few hours, are the most precarious of the life cycle of the human being after birth. This is because of the sudden change from the parasitic existence of the fetus before birth to an independent one after birth. Much of this neonatal mortality can be prevented by those caring for the newborn during this period.

The first problem for a newborn is to establish respiration. Most will cry soon after birth, but where certain drugs have been used, or it has been necessary to resort to operative procedures, or the length of labor has been unduly long, the infant may make no spontaneous respiratory efforts. The formerly used rough ways of vigorous spanking, swinging, or chest compression are considered undesirable and may even be deleterious to the baby's chances of breathing. It is now generally recommended that the air passages be cleared of blood, mucus, and liquor amnii, and that the exhaled breath of the operator be used to inflate the infant's lungs through a trachael catheter, by controlled mouth to mouth breathing, or, best, by using oxygen or a mixture of oxygen and carbon dioxide to inflate the lungs.

Even after breathing has become established, the color of the infant may indicate poor oxygenation of the blood. This is frequently due to poor opening of the lungs or a partial atelectasis. Here carbon dioxide will stimulate respiratory action and Henderson even advises its use for most newborn babies as a safeguard against incomplete opening of the lung cells. The x-ray will help in the diagnosis of this condition and the stethescope will distinguish it from a congenital heart disease.

Undoubtedly many babies die in the first days of life from the effects of an abnormally large thymus gland. An apparently well child may become suddenly blue, limp, and apneic. The child may have had difficulty in breathing and a poor color from birth. Any child with such a history deserves an x-ray picture of the chest and if an enlargement of the thymus is found, treatments by the x-ray should be started at once. True, all apparently enlarged thymus glands do not cause symptoms and symptoms may no doubt be caused by some glands not apparently abnormal to the x-ray. Pressure from the size of the thymus may not be the only factor responsible for the thymic symptoms but it may be stated as a rule that in all severe or fatal cases of thymic disease referred to here the gland is demonstrably larger than normal. Oxygen is often necessary to carry such an infant along until its condition improves. It is thought by some that pylorospasm and hypertonic states are caused by overstimulation of the vagi by an enlarged thymus. There are several reports that x-ray treatments of the thymus relieve this condition without the use of atropine.

Other causes of inspiratory apnea must not be overlooked, such as the atelectasis referred to, cerebral hemorrhage especially into the pons, injury of the adrenals by difficult extraction, or congenital debility.

It is highly recommended that after a difficult forceps or breech delivery the child be given father's blood intramuscularly as a safeguard against cerebral hemorrhage. A tendency of the child to bleed because of poor clotting time from any mucous surface or from the umbilicus or a circumcision wound is best combated by intramuscular injection of blood or a blood transfusion.

Loss of many viable premature infants is no doubt due to carelessness in maintaining a normal body temperature, lack of diligence in keeping the air passages clean, and neglect in giving oxygen and carbon dioxide when the child occasionally forgets to breathe.

More honest observation of the newborn would prevent many unexplained deaths. More general use of the x-ray would aid in better diagnosis and treatment. More liberal use of oxygen and carbon dioxide would support the newborn until it can adjust itself to a new life. And, finally, if every infant that died soon after birth were autopsied, the attending physician would learn much to guide him in his obstetrical care as it affects the infant and in his treatment of the infant after birth.

THE NEW HEALTH OFFICER LAW

AS PART of the new set-up in the Division of Public Health there has been mentioned at different times the need of a new law providing for health officers. This bill, before it was offered to the legislature, was carefully considered by rep-

resentatives of the medical association and was, as a matter of fact, written largely with the aid of these men. It was approved by the Council of the Indiana State Medical Association in its final form and was sponsored by the legislative committee under Dr. O. T. Scamahorn. It was introduced to the legislature by Senator Miller, who is the Councillor from the Eleventh District. It passed the Senate by a vote of 26 to 13 and was introduced into the House by Dr. Willan, who is the Representative for Morgan County. In the House it also had the support of Dr. Stephens, the Representative from Marshall County. It passed the House by a vote of 66 to 23, and was signed by the Governor on March 11. It has the approval of those in charge of the Division of Public Health in Indiana and also of the United States Public Health Service, being essentially like health officer laws which have been passed by other states.

A brief analysis of the law will be of interest: As soon as this law goes into effect all health officers must be physicians. The county health officer on a part time basis will be nominated by the county commissioners; the city health officer will be nominated by the city board of health, which in turn is appointed by the mayor. After having been nominated, these men must be approved by the state board of health before they can finally be appointed. This does not mean that the state board of health can make appointments but only that it has the right to satisfy itself concerning the qualifications, the willingness, and the ability of the appointee to co-operate with the state board of health and, more particularly, with the doctors of the local community. For example, there are now health officers in Indiana who do not receive the approval of, and therefore cannot have the co-operation of, their colleagues. Obviously such a man is of little use to the community as a health officer. We feel that the first requirement of a health officer is that he should be able to co-operate with and have the approval of his fellow physicians.

Each county and each city will have a health officer. Towns and villages will be under the county health officer. All health officers will be considerably better paid than in times past inasmuch as they will receive three cents per capita instead of one and one-half cents or two cents per capita; no county health officer will receive less than two hundred dollars a year, and no city health officer less than one hundred dollars a year. This will reduce the number of health officers in the state to approximately 186. At present there are 562, approximately half of whom receive ten dollars or less a year, and approximately 200 of whom are not physicians. The need for a health officer in every little village has long since passed, and it will obviously be better to have fewer health officers who are better trained and better paid.

In case a county, a city, or a group of counties should wish to form a full time health unit, they may do so. In that case it would be necessary to win the approval of the county commissioners or the city council, as the case might be. They would then employ a physician as full time health officer. He would be paid whatever sum the county commissioners and the applicant for the position might agree upon. He would also have such other help as he might need, the county, city, or group of counties being responsible for the financial support of such a unit. Nearly all of the states in the Union have this arrangement and it is extremely important that Indiana should get in line. It is well to bear in mind, of course, that *no county is required to establish a full time unit, but may do so if it desires.* Until it does do so, the part time system will prevail.

In case a county does not wish to engage a full time health officer, it may hire full time public health nurses who will be *under the health officer* having jurisdiction and therefore will be assured of proper medical supervision.

The law also provides that the health unit may receive aid from private individuals, corporations, philanthropic organizations, State or Federal governments, provided the conditions under which the grant is made are acceptable to the local authorities and to the state board of health. Unless such grants have the approval, then, of the local health unit and of the state board of health, they can not be accepted.

This is a fundamental change in the health law of Indiana and therefore should come into force only after time has been given thoroughly to consider all the details. Consequently it is arranged so that the law does not displace the present incumbents of the health offices. They will be allowed to serve their terms and only at the end of the terms (unless they are removed sooner for some reason) will the law go into effect. The county commissioners of any county can, however, declare an emergency at any time to set up a full time health unit. By having this law go into effect after some little time, it will give the board of health and the profession a chance to adjust themselves and to weigh the merits of various plans before they are put into effect. Before the necessity is upon us, it will be well if the health authorities and the representatives of the profession carefully consider the demands which will be made and the opportunities which will be afforded by the new arrangement. We believe that this law is a big step in advance both in the health work of the state and in the placing of this medical problem in medical hands.

The profession will also be interested to know that a bill was passed repealing the old hydrophobia law which required that patients receiving free treatment for rabies should come to Indianapolis at the expense of the state. They may now be treated according to an arrangement by which the home physician goes to the drug store and fills out a blank just as he does when an indigent

patient needs diphtheria, tetanus, or scarlet fever antitoxin. This has the effect of turning the prophylactic treatment for rabies back to the home physician where it now belongs.

OCULISTS AND THE CODE

We were a bit perturbed, recently, by the receipt of a New York communication bearing the advice that we were indebted to the Code Authority of the Optical Retail Trade in the sum of three dollars, plus a like amount for each person in our employ. A considerable number of pages of printed matter, some of which afforded rather interesting reading, accompanied the suggestion that it would be well to make payment of the above amount within the month.

A part of the rather intriguing information to be gleaned therefrom was the fact that the Optical Retail Code Authority was vested in a group of twenty men, nine of whose names are preceded by the title "Dr.," although a check of these names in the current issue of the A.M.A. directory fails to show any of them to be possessed of a medical degree; hence, we surmise that they are optometrists. The remaining members of the group have the title of "Mr." and are apparently concerned with the retail optical trade.

Apparently several other members of the Indiana State Medical Association were in a dilemma similar to ours when they received this notice, for we have had several inquiries as to what it is all about. A letter from Dr. Woodward of the Bureau of Legal Medicine and Legislation of the A.M.A., sets matters fairly clear and the attention of oculist members of the Association is especially directed to his comment (quoted below).

It seems, from the New York communication, that the Optical Code contemplates that those physicians doing refractions and dispensing glasses to patients are regarded as coming within the Optical Retail Code. Dr. Woodward cleverly points out that while this Code is organized under the National Industrial Recovery Act, yet the Act "does not purport, in any way, to regulate or control the practice of medicine." Further, he states, "under no provision of the Act can a physician who confines his work to rendering professional medical services be subjected to any provision of the Code or to any assessment under the Code." Concluding, Dr. Woodward advises, "The American Medical Association has protested against the attempt of the Optical Retail Code Authority to bring physicians as such within the scope of the code that it administers. Pending the adjustment of those protests, physicians who are engaged in strictly professional work are advised to refrain from answering the questionnaire that the Optical Retail Trade Code Authority has sent to them and to refrain from paying the attempted assessment for the support of that Code Authority. The outcome of the protest will be promptly reported in THE JOURNAL." This would seem to clear up a little the question that no doubt has bothered the minds of many of our members and we are disposed to follow the suggestions of Dr. Woodward to the letter.

It is an odd commentary on the officials of the NIRA to note that they have, up to this time, ignored the several thousands of medical men engaged in various phases of ophthalmology; we have had no representation on the "official" committee and, so far as we have been able to ascertain, have not been consulted to any extent in the preparation of the Code. We were privileged to see an early draft of the Code and at the time were advised that this had been all but adopted. It seems that some one or some group entered such serious objections to the Code that it was de-horned, desexed, and all but de-coded. As the Code now stands, and as we view it, it will serve little or no good purpose; it is an a-dentate thing.

Don't send your three dollars to New York or to any other place until we have further advice from the Bureau of Legal Medicine and Legislation of the American Medical Association.

WATCH THE SCHOOLS

Schools teach children. That is why we have schools. What do they teach the children? That is an important question because upon its answer hangs the fate of the nation and of its component parts. We are not finding fault with the schools. The writer of this article is a teacher, and believes in teaching as in nothing else. He thinks that in the main the schools are excellent, but just the same that they should be watched. Just now we are concerned with various practices and theories which seem to be disadvantageous to the medical profession and the best interests of medical science. Whether or not this tendency increases until it is a real menace will depend upon what the public, and in particular the young people, are being taught.

School superintendents are aggressive, and are looking for ways of being helpful to the children. Surely they are not to be criticized for that. Unfortunately, however, they can not be expected to understand certain technical phases of the question. Let us suppose that they tell all of the children to come to the school physician for their immunizations, for treatment of their cuts and sprains, for treatment of colds and the like, for dental work and tonsillectomies, as they do al-

ready in some places. It seems very nice and apparently splendid for the children. It costs them nothing; the doctor is on a small salary and therefore it costs the school no great sum. The school doctor likes to be busy and to be of as much service as possible to the school and to the children. It is too much to suppose that the child or his parents will see the dangers in such an arrangement, but just the same the child is being taught to get something for nothing and is being weaned away from the relation which has caused the medical profession to be the most progressive and useful of all professions.

In the recent immunization campaign there were only a few instances in which there was any serious difficulty or trouble. In nearly every one of these the reason was to be found in the fact that an ambitious superintendent of schools wishing to do the right thing, and being disgusted with the slow and apparently inefficient methods whereby consent of the parents was sought, decided to take the thing in his own hands, get all of the children together in a bunch, and have the school physician immunize them. There is no doubt that such methods would have immunized more children, but it would also have taught them to expect something for nothing, and thereby hangs the difficulty.

What is being taught in the normal colleges concerning the relation of doctor and school? The medical profession has a right to know because it is one party to such an arrangement. If the normal schools are teaching that the schools are responsible for the medical care of the child, we should know about it. Maybe there are parents who will wish to retain that responsibility and maybe there are doctors who would like to have something to say about it. What is taught in the normal schools will probably be considered as law and gospel by the graduates who will be teaching thousands of children very shortly.

What are the high schools and the liberal arts colleges teaching the fathers and mothers of the next generation concerning the relation of the family to the doctor? What are the professors in the medical schools teaching the boys concerning these matters? Obviously the clinical professors may be expected to protect the rights of the profession, but it is possible that the full-time instructors may not understand the relation concerning which we are writing. There is no need to ask what is being taught by most of the social service groups and departments; we should have been asking that a number of years ago. It is so easy to solve certain social problems by sending the patient to the dispensary for free treatment, and it is so much easier to make a complete case record and have it all entirely under the control of the social service worker by handling it in that manner. But that is water under the bridge now. We should have had a finger in the teaching of the years gone by. "Too busy to monkey with it," we have said. Maybe we are still too busy to take part in the teaching of the public and the children of today, but if we know what is good for the profession we love, we will willingly find the time.

AGAIN, THE DRUG HOUSE

The ever-increasing number of new products brought to the attention of the physician calls for a word of warning against unscrupulous manufacturers and their methods of getting their wares before the physician. Some of the better grade chemical houses are unfortunate enough to have as their representatives men who place sales above the value of correct information, and the physician is thereby misled. To be sure, such situations are fortunately rare, and are not to be counted where both the manufacturer and his detail men make a deliberate attempt to deceive the physician. Only recently the literature of a concern making a bismuth preparation carried the statement that their product, when used alone in the treatment of syphilis, was superior not only to the arsphenamines but actually should replace them. The drug house should not be accused of wilfully making a false statement, but in the light of the most accepted ideas of treatment in syphilis, the statement amounts to a falsehood. We have before us a statement that "lobar pneumonia . . . responds more promptly to . . . vaccines. There is prompt improvement and the mortality is greatly reduced." One need not be from proverbial Missouri to question how much "prompt" good could come from the introduction of a few million killed bacteria into a body already struggling with untold billions of live organisms. The whole theory of the usefulness of vaccine therapy, as we understand it, falls before such contentions. Again, there is thrust before us a package carrying a label that the contents are made from the essential principles of certain substances "scientifically compounded." How else would you want anything compounded? The statement is obviously a trick and is made euphonious to distract from a demand for a true description of the contents. To those and other printed statements, irresponsible detail men present alleged facts which are not easy to check. All in all, we should be careful to the point of being suspicious about new products. The Council on Pharmacy and Chemistry of the American Medical Association has gone a long way to assist us. A product which bears the mark "Accepted" has been studied by a council of experts working for us. When this body is skeptical for any reason about a new remedy, or if the producer will not willingly cooperate in placing all the facts before the user, the Council does not award the label "Accepted." A more careful study of facts about the drugs we use should allow us to employ them more intelligently.

EDITORIAL NOTES

GOAL: 300 NEW MEMBERS IN 1935. TO DATE: 86.

One hundred per cent paid-up membership counties include CARROLL, NOBLE, HANCOCK, and GIBSON. What county will be next added to the list?

WE HOPE that a good many physicians were able to see the sculpticolor of Sir Luke Fildes' "The Doctor" when it was on display in Indianapolis in March. Those who saw it also listened, while they looked, to a musical record accompanied by a compelling voice which called attention to the worthiness and faithfulness of the family physician throughout the ages.

THE postgraduate "season" is at hand. Those of you who like to be considered progressive physicians well know that postgraduate training is an essential part of each year's work. The Indiana State Medical Association will conduct its postgraduate course at Evansville, May eighth. The Indiana University School of Medicine will hold its annual two weeks course May twentieth to June first, inclusive (preliminary announcement appears on back cover page of this issue). Plan now to attend both of these meetings. They are arranged solely for your benefit. Complete announcements will be published in the May first issue of THE JOURNAL.

VARIOUS county medical societies responded to the requests to ask legislators to support or check pending legislation of interest to the medical profession during the session of our state legislature. Some societies sent to THE JOURNAL copies of the resolutions passed and sent to their legislators. Bartholomew, Hancock, Carroll, Delaware-Blackford, Boone, and a group of county societies from the Third District were among those who responded promptly. These and other societies which complied with requests for active assistance are commended for their proof of interest in their own profession and its future welfare. What of those who took no action?

THE government again has warned its citizens, particularly those in the professions who are supposed to have ready cash, to beware of the fakers who print and sell tickets on the big foreign lotteries. For the most part, the chances of profit are very remote (as low as one in two thousand) to say nothing of the fraudulently printed worthless tickets. Post office officials are doing all in their power to prevent the traffic in the swindle but they can not do all the shielding for us. We should not buy the chances in these foreign lotteries since it is obvious that there are so many possibilities for our money never to get into the actual drawing. Unless we just have to obey the urge, let's save our money for our own chances in the boom days around the corner.

ONE of our pet peeves, and one that has rather frequently been aired through the medium of THE JOURNAL, seems to be in a fair way toward at least partial correction; we refer to the passage of the antistream pollution bill at the recent session of the Indiana legislature. For years we have bemoaned the fact that Indiana law failed to provide a proper remedy for this evil, and it now seems that we have a measure designed to correct the many abuses over the state. While we probably will not live to see the many benefits to be derived from this law, our descendants will have occasion to be grateful to the present generation for its foresightedness. It now remains for a vigorous enforcement of the act to make it worthwhile and we trust the proper authorities will see to that.

FROM time to time we have commented on the general subject of collection agencies, stressing the importance of knowing with whom you are dealing as well as knowing the terms under which your contract is operative. We thought that enough had been said on the subject to thoroughly inform the entire membership of the Association. However, it would seem that one of our members does not carefully read THE JOURNAL, as is evidenced by the wail received from him recently. He states that last summer he entered into an agreement with a Chicago company, believing that he was to be charged a commission of fifty per cent for collections made. Well, it is the same old story; they made some collections *and now he is trying to collect from them.* The company advises that it is entirely probable that the doctor is indebted to them. The member closes his letter with the admonition, "Get a receipt showing your contract terms before you sign." To which we might add the suggestion to read THE JOURNAL and thus keep informed as to what is going on in medical Indiana.

WE ARE inclined to agree with the ever-increasing number who hold the opinion that we have too much legislation, so it is with a sense of relief that we note the adjournment of the recent session of the Indiana General Assembly. As usual, there was noted much petty bickering, jockeying for this or that position, small and large blocs. We had the notion that with such a large majority in both houses, our Democratic friends would be able to ride through such legislation as they might wish (and they were), but it seems there was considerable opposition to many measures, this opposition at times appearing to be of rather formidable

proportions. We of the Indiana medical profession are to be congratulated on the fact that we came through with whole skins; the several attacks on our basic medical law of 1897 failed of their purposes.

We recently predicted that the new secretary of the Madison County Medical Society, Dr. Maynard Austin, would put the members thereof through their paces. The prediction seems to be somewhat borne out by the following extract from his latest bulletin: "The Board of Censors has been having some serious questions to consider lately. One, that of admitting certain men and having the fun of kicking them out of the society afterwards if they continue certain well known unethical practices. In view of the certainty of some form of state medicine, all the outsiders are coming into the fold, but lacking the intestinal fortitude to file written charges, members will probably allow things to be as they always have been. It is a certainty that no one we might admit could be worse than some from whom we accept dues, but who seldom grace our meetings. The legal fraternity is having the same problems and it would be well for all professional societies to do an occasional housecleaning." Maynard says things plainly when he does say them.

The recent scarlet fever epidemic, which has been rife in many of our larger communities during the past winter, brings to mind certain observations we have made on such subjects during the past several years, principally that of cooperation with the local and state health officials. In one of our larger counties, where the epidemic assumed rather large proportions, we are pleased to note that the various health officials, strongly supported by the parent organization, the Division of Health, worked together very nicely; frequent conferences were held and the general profession was at all times kept informed as to conditions. As is usually the case, however, there were a few sour notes in the symphony, here and there; whether these came from disgruntled physicians or whatever the cause, we feel that in such times unanimous support should be given health officials in their endeavors to stamp out disease.

The recent death of Dr. Franklin H. Martin removes from our ranks a man who led a very busy, not to say spectacular life. For many years a leader in the field of surgery, in 1913 he brought into existence the American College of Surgeons and at about the same time he founded *Surgery, Gynecology and Obstetrics*, a leading journal in its field. The annual Clinical Congress was one of his pet projects, as was the organization of the Gorgas Memorial Institute of Tropical and Preventive Medicine. For many years, Dr. Martin served in the capacity of director-general of the American College of Surgeons, having served as its president some years ago. While we never have been in accord with some of his policies, we have recognized him as a man indefatigable in the pursuit of what he deemed the best interests of the profession as a whole. His long and arduous labors in the endeavor to improve hospital conditions in North America are widely known, a thing that alone would serve as his monument. Under the title "The Joy of Living" his autobiography was published in 1933, and gives a complete story of his life and accomplishments.

From one of our mid-state cities comes to the office of the Indiana State Board of Medical Registration and Examination a quaint sort of letter, written by a woman who had been exercising her unusual power of healing and who had been asked to stop, cease, and desist by said board. The letter is reproduced *ad literatum et punctatum:*

"Dear Sir

"just recieved your letter. still informing me that I am violating the medical practic act.

"I am very sorry and if you all feel that way about it.

"I can quit for I am not making anything. and it will give me more time for my self.

"So from now on I will tell them that the medical association will not permit me to Heal them

"For we have nothing and could not pay. we are doing well to keep going as it is

"As I said in my other letter I did not Know that I was doing any thing against the law.

"For I have had this magnatism or Elecricty or what ever it is; ever since a child and am sure I was inocence in doing good for others.

"As I said before *God* gave it to me to use and thought I was doing the right thing to Heal the people.

"Have Heald people that the M. D. gave up and said they could not get well. one woman had cancer of the rectum. and she was heald over nine years ago. and is still living.

"But as I have given you my word I will not Heal another one even if it would save their life for when I give my word I mean it for if one word is not worth any thing they are not either.

"I am hoping this will be enough to convince that I am given my word. to quit"

REPORT OF LEGISLATIVE COMMITTEE

Along with the majority of the citizens of Indiana it was the sincere hope of your legislative committee that the 1935 session of the General Assembly would be a thing of the past and the lawmakers would have closed up shop and gone home for another two years by the time the April JOURNAL reached you. This seems destined, however, not to be, and it now appears an almost foregone conclusion that a special session will be necessary in order to correlate the state and national recovery programs.

As during the regular session, the principal interest of the medical profession in the special session, if and when it is called, will be in any attempts that will be made to enact legislation which will be an entering wedge for state medicine. It is rather safe to say that if nothing along this line is undertaken by Congress, nothing along this line will be attempted here in Indiana. For this reason it behooves every member of the profession to keep himself attuned and informed as to any attempts that may be made in Washington to make sickness insurance part of the social security program.

The special session in Indiana will be devoted chiefly to the question of taxation. A committee composed of members of the House and the Senate has been appointed to study and draft tentative tax legislation, to be enacted at the special session, in order to meet the cost of the social security program (notably old age pensions and unemployment insurance) and to meet the demands of the farm bloc, a very potent force in any Indiana session, for still further reduction of property taxes and further spreading of the tax burden. A number of methods have been suggested for accomplishing this by adding to the present gross income tax or enacting a retail sales tax.

Among the many tax bills introduced during the regular session just closed was one which proposed that a two per cent retail sales tax would be introduced, and the gross income tax of merchants, business men, etc., would be cut from one per cent to one-quarter of one per cent. According to this proposal professional men, teachers, doctors, dentists, nurses, etc., would have to continue to pay their full one per cent gross income tax and, in addition, would pay a two per cent retail sales tax on all their purchases. This would be most unfair and your committee feels that if a reduction in gross income tax is given to the merchant and business man, the professional man and woman should receive the same benefit.

The March issue of THE JOURNAL gave a detailed résumé of matters especially affecting the medical profession before the legislature at that time. It reviewed the battle and the ultimate defeat of the chiropractic bill in the House under the splendid leadership of Dr. H. R. Willan of Martinsville and Dr. R. C. Stephens of Plymouth. It told of the introduction of an almost identical bill in the Senate. The bill finally was reported out of the Judiciary A committee without recommendation, and when it came up for second reading a motion was made for indefinite postponement. Senator Jesse E. Wade of Mt. Vernon spoke in favor of the bill and attacked the medical profession vigorously. Immediately a number of senators took the floor in defense of the profession and spoke against the bill. Among them was Dr. George Miller of Logansport, George Sands of South Bend, who displayed the chiropractic ads in the telephone book and labeled such ads as "fakes," Thurman Gottschalk of Berne, Ralph H. Jernegan of Mishawaka, I. Floyd Garrott of Battle Ground, E. C. Swihart of Elkhart, Alanson L. Albright of Cayuga, and Claude B. McBride of Jeffersonville. Although he did not speak, Dr. I. N. Trent, senator from Muncie, had much influence in the final disposition of the bill, which was killed by a standing vote of 27 to 4.

A résumé of the bills of special interest to the profession which were passed and signed by the Governor follows:

PUBLIC HEALTH

S. B. 222 (Miller-Trent). Removing cost of administering antitoxin and antirabic virus from state and placing it with county, city or town which used it.

S. B. 223 (Miller-Trent). Repeals present hydrophobia treatment and dog fund laws and provides for treatment of rabies victims at their homes by local physician at expense of county instead of state. Effective July 1, 1935. (This means that patients are no longer to be brought to Indianapolis to receive the Pasteur treatment at the expense of the state.)

H. B. 490 (Nicholson-Willan-Andrews). Allows sterilization of persons committed in insane hospitals if examining physicians believe them probable potential parents.

H. B. 211 (Lee). Authorizing townships to provide insulin for persons afflicted with diabetes who are unable to pay for the medicine.

S. B. 35 (Swihart-Biddle-Brandon). Prohibits holding of dance marathons and other similar endurance contests.

S. B. 233 (Miller-Trent). Provides that all health officers shall be physicians and eliminates town health officers, maintaining only county health officers in those localities where there are no incorporated cities. Counties and cities *may* have full time health officers for four-year terms; salary of three cents per capita, less population of cities in the county having health officers, for county health

officers; salary of either not to be less than $200 not more than $1,800 annually. (See editorial, page 192.)

H. B. 293 (Emig and others). Stream pollution measure. Administration measure giving the Department of Commerce and Industry jurisdiction in the control of stream pollution. Action on violations to be brought in local courts.

S. B. 161 (Albright and others). Providing for the licensing and regulation of tourist camps; license fees to be based on the number of sleeping accommodations; providing sanitary regulations.

PROFESSIONAL RULES

H. B. 218 (Stanton-Willan). Amends dental registration law to increase license fee from $1.75 to $3. Provides that Board of Dental Examiners may revoke licenses for "unprofessional conduct," which include false advertising, use of signs with letters more than seven inches in height, and advertising painless dentistry or professional superiority over other dentists.

S. B. 43 (Brandon-Smith-Albright). Gives the State Optometry Licensing Board wider latitude in regulating the profession and prescribing penalties for unprofessional conduct. Cuts out price advertising by optometrists. Through errors in newspaper reports, impression has been gained that this will allow optometrists to invade the medical field. This is untrue, for the measure was carefully checked and contains nothing which would enable optometrists to practice medicine, to use cycloplegics in eye examinations, or give them an exclusive right to fit glasses.

S. B. 139 (Albright and others). Providing for licensing of beauty culturists and regulation of beauty shops by a board of three members to be appointed by the Governor, one a beauty shop owner, one an operator and one a licensed physician. Effective August 1, 1935.

H. B. 437 (Pickens-Mills). Discontinuing examinations by the State Board of Pharmacy for the grade of assistant pharmacist and requiring the board to hold at least four examinations after August 1, 1936, by which present assistant pharmacists could be advanced to the grade of registered pharmacist. The examination fee would be $10. Emergency.

MISCELLANEOUS

H. B. 253 (Nicholson). Rewrites present law concerning maternity hospitals, children's boarding homes and infant-placing agencies. Provides that any person who assists in placing a baby in a home shall come under the placing agency license. Children's boarding homes shall be licensed by the department of public welfare and are subject to inspection by that department, instead of county or city health boards. Records of maternity homes required to list only the address of a woman patient and not all of her places of residence during the previous years. *Birth must be attended by a qualified physician.* (The present law allows a midwife or physician.) Licenses may be revoked if the institution does not follow the regulations promulgated by the department.

H. B. 289 (Nicholson and others). Clarifies and strengthens existing insurance laws. Makes organization comply with the 1929 corporation act and the 1933 banking act. Places insurance department in charge of companies which otherwise would be handled by receiver. Also provides for a plan for merger and reinsurance standards in health and accident policies. Act assembles all present laws giving the department a broader power to protect the public. This will bring these groups who are incorporated and are selling hospital and medical insurance policies under the insurance codes.

H. B. 365 (Stephens and two others). Authorizing common councils to appropriate funds to aid benevolent associations in construction and maintenance of hospitals in fourth and fifth class cities that have no other hospitals. Permitting issue of bonds and fixing of a levy up to eight cents. This, it is understood, was specially desired by the Marshall County Medical Society to take care of a local situation.

S. B. 301 (Eichhorn and others). Requires coroners in counties of 200,000 to 400,000 population to photograph bodies before removal of persons who have met death by violence or casualty.

S. B. 333 (Weiss-Schricker). Excludes persons employed on work relief projects from workmen's compensation act; establishes a method of caring for an employee in case of injury or death; provides the injured person shall continue to receive the same amount of relief as when hurt and in case of accidental death or permanent disability, the Governor's unemployment relief commission is authorized to allow up to $3,500 and funeral expense of $200.

H. B. 388 (Mayhill and three others). To require the teachings of the nature of alcoholic drinks and narcotics and their effect on the human body in grades 4 to 8, inclusive, of elementary schools and at least two years in high schools.

BILLS FAILING TO PASS

H. B. 66 (Hoffman-Klen-Roush-Kent-Braun). Creates a separate board of chiropractic. Indefinitely postponed in House (52 to 37).

S. B. 229 (Wade-Sohl). Creating a separate board of chiropractic, similar to H. B. 66. Killed by rising vote, 27 to 4.

S. B. 227 (Lynch). Garnishee bill. Defeated in Senate. A similar bill was defeated in the House. Although the Indiana State Medical Association was not on record approving such legislation, several county societies advocated it, and the physicians in the House and Senate voted in favor of the passage of these measures.

S. B. 118. Extends limit from thirty to sixty days in treatment of compensation cases. This would have been of great aid to the physician. Passed Senate, killed in House.

(Continued on page 204)

THE PRESIDENT'S PAGE

Some of those who are not close to the program of relief measures ask why we are so wrought up over certain proposed legislation.

The fact is that organized medicine is not trying to interfere with social insurance in a general way, only that part which embraces compulsory sickness insurance and the regimentation of medical men, which is a part of the project of sickness insurance as per the Epstein bill, which has for some time been in readiness for introduction into the legislatures of forty-eight states, as soon as the Wagner federal bill is passed. Although the Wagner bill does not at this time embrace compulsory sickness insurance, the synchronization of these two proposed laws would render helpless the medical profession to maintain its independence. Such a set-up would be directed by the federal labor bureau through appointees and down through the states by appointees to the last man in the most remote part of each state. What a family tree of appointees! What a desperate dilemma for the most beneficent profession in the world to find itself in if the Epstein bill should pass and become a law!

He who is deluded by a false sense of security says, "Why worry? It has not happened yet." But when there are prowlers, would it not be wise to turn the key against them? Why wait until every vantage point is lost, like helpless children in a burning schoolhouse? Why wait until the sand in the hour glass has run through? To him who insists that this is not the time or place to protest I have but to say, "Talk not to me of time or place." Now *is* the time and this *is* the place for us to express ourselves like independent law-abiding citizens for the very good reason that we have truth and justice on our side, which should prevail.

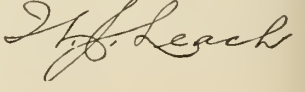
The whole scheme of regimented medicine from top to bottom simply means that medical men are to be directed by a great corps of laymen appointees and organized medicine will fall into parts by schisms and cleavages and love's labor of three-quarters of a century will be lost just as is happening in England today where six thousand doctors recently joined labor unions with price-listed services. I ask you in pity and in candor, is this conducive to scientific medical progress or professional dignity?

To the medical man who pleads ignorance as to who is responsible for the propaganda which has led up to the present controversy I have this to say: Take the Epstein bill and trace it to its source and note its ramifying relations to certain lay social organizations who have been gradually planning for this impending pitfall for the medical profession. The protest from the medical profession came through a desire to pursue its course of scientific medical progress unhampered, without lay interference or direction, being inspired by increasingly higher ideals of medical standards, medical education and equipment, and a better knowledge of its own responsibility than the laity could possibly have, its guiding star being a most wholesome desire for the betterment of human society as a whole. Yet some ill-advised socialites say we are greedy, selfish and mercenary, obviously an opinionated product of adroit organized propaganda.

I beg your indulgence in a personal reference so that I may state clearly that partisan politics or party names have no allure for me. Only ethical and just legislative policies concern me—I have no political favors to ask for and certainly none to give. By this principle and policy I feel that not only will the medical profession be best safeguarded, but public health and public welfare as well will be protected.

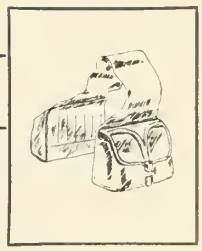
About twenty-five centuries ago Hippocrates broke through the barriers of magic, mystery, religion and superstition, responsible to no one but himself, and instituted a real medical science, the fundamental principles and ethics of which remain fundamental to this day—a long trail from sun-gods and totem poles. And through the ages, up to the present, our profession has cared for the sick and indigent with time-honored fidelity. Of course, there were lapsing intervals in which nothing cultural was done by any one, but Hippocratic medicine in some almost mysterious manner survived. Is it possible that a profession noble and enduring enough to survive the hardships and reverses that medicine has, through the dark ages, should be even threatened by an enlightened and free people with regimented or impanelled control, to be directed by lay officialdom?

He who thinks the medical profession is not dependable or is untrustworthy, let him go to Detroit and see the workings of the Wayne County Medical Society, and note its success in conducting a relief program which its members devised. Such a visit should be good for doubting Thomases; and have we not consistently reminded you of the importance of the county society as a working unit of organized medicine? And who knows but it may be the final solution to this vexing problem? Our only hope on this terrestial sphere is that organized medicine speak as one man against all propaganda, legislative or otherwise, tending toward state medicine. Let us not mistake pandemonium for panacea!





INDIANA MEDICINE IN RETROSPECT



L. G. Zerfas, M. D.
Historian, Indiana State Medical Association

In previous articles the importance of Transylvania University Medical College has been noted along with short biographical sketches of some of the outstanding members of the faculty, as well as the facilities afforded by this institution for medical education. Below will be found a list of students from Indiana, or those who later settled in this state, who obtained their medical education at Transylvania.†

Year Name of Student Address

1799-1801 Samuel McKee, Jr., Vincennes.

1809-1810 Andrew P. Hay, Charleston.

1820 George F. Jaquess, Posey Co., Ind., 1st yr.
graduated Med. Col. of Ohio, 1822—Thesis, "Sick Stomach."

1822 John H. Sanders, Millersburgh, Ky., 1st yr.
Wm. E. Talbott, Charleston, Ind., 1st yr.
*Robert L. Wiley, Salem, Ind.
Thesis, "Non Contagiousness of Yellow Fever."

1824 Washington Flood, Kentucky, 1st yr.
Samuel Follis, Indiana, 1st yr.
*James Fowler, Indiana.
Thesis, "Indiana Epidemic of 1822-23."
James R. Mendenhall, Indiana, 1st yr.

1825 *Israel Thompson Canby, Madison Co., Ind.
Thesis, "Cholera Infantum."
*Samuel Trebble Crews, Madison Co., Ky.
Thesis, "Epidemic Fever of Wayne Co., Ind., in 1823."
Nathaniel Field, Limestone Co., Ala.
Washington Flood, Perry Co., Ind., 2nd yr.
William Frame, Henry Co., Ky., 1st yr.
*James R. Mendenhall, Indiana.
Thesis, "Indiana Bilious Remittent Fever."

1826 John M. Baker, Sullivan Co., Ind., 1st yr.
Paris C. Dunning, Monroe Co., Ind., 1st yr.
*Washington Flood, Brackenridge Co., Ky., 3rd yr.
Thesis, "Mercury."
Wm. James McClure, Jefferson Co., Ind., 1st yr.
Edward Coleman Moberley, Monroe Co., Ind., 1st yr.
James Kobler O'Haver, Sullivan Co., Ind., 1st yr.
Andrew Rogers, Clark Co., Ind., 1st yr.

1827 Wm. James McClure, Jefferson, Co., Ind., 1st yr.
Andrew Spear, Jefferson Co., Ind., 1st yr.

1828 John Leland Mothershead, Scott Co., Ky., 1st yr.

1829 *Charles Hay, Salem, Ind.
Samuel G. Mitchell, Indianapolis, matriculated, 1st yr.
John Leland Mothershead, Scott Co., Ky., 2nd yr.
Preceptor—Dr. Richards, graduate of Transylvania.

† From the register of the Transylvania University library through the courtesy of Mrs. Charles F. Norton, Librarian.
*Graduate.

Year Name of Student Address

1830 Wm. Frame, Halifax City, Va., 1st yr.
Preceptor—Wm. Clark.
*Samuel G. Mitchell, Indianapolis.
Honorary degree of M. D.
*John Leland Mothershead, Scott Co., Ky.
Thesis, "Peripneumonia."
Elijah Newland, Salem, Ind., 1st yr.
Preceptor—Dr. Newland.
Jacob Widener, Sullivan Co., 1st yr.
Preceptor—Dr. Davis (a graduate of Baltimore).

1831 Alfred Lewis Castleman, Eugene, Ind., 1st yr.

1832 Mathews Wells Flourney, Crawfordsville, Ind., 1st yr.
Preceptors—Dr. Keen (a graduate of Baltimore) and Dr. Blackburn (a graduate of Philadelphia).
Thesis, "Gout."

1834 Joseph H. D. Rogers, Lexington, Ky., 3rd yr.
Preceptor—Prof. Dudley.
Samuel Reid, Paoli, Ind., 1st yr.
Preceptors—Dr. Robert C. Newlin and Dr. Bowles of Salem, Ind.
*Alexander Stevenson, Putnam Co., Ind.
Thesis, "Autumnal Fever."

1835 Samuel Reid, Paoli, Ind., 2nd yr.
Thesis, "Milk Sickness."

1836 Joseph G. Norwood, Madison, Ind., 3rd yr.
Preceptor—Prof. Cooke.
Thesis, "Spinal Diseases."
Cornelius White, Paoli, Ind.
Thesis, "Milk Sickness."

1837 Hamet N. Helms, Carlisle, Ind., 1st yr.
Preceptor—Dr. John W. Davis.
John S. Hillis, Crawfordsville, Ind., 1st yr.
Preceptor—Dr. Winton Holes.
Robert M. McClure, Madison, Ind., 1st yr.
Preceptor—Dr. Joseph Norwood.
Joseph G. McPheeters, Fayette Co., Ky., 1st yr.
Preceptor—Lloyd Warfield, M.D.
Wm. Miller, Greencastle, Ind., 1st yr.
Preceptors—Dr. Talbott and Dr. Cowgill.
Wm. W. Potts, Paoli, Ind., 1st yr.
Preceptors—Dr. Reid and Dr. White.

1838 O. Henson, Indiana, 1st yr.
Preceptor—Dr. E. Malay.
John A. Rogers, Parkersburgh, Ind., 1st yr.
Preceptor—Dr. Henry Rogers.
Peter Smith, Noblesville, Ind.
Preceptor—Dr. S. G. Mitchell.
*Peter Smith, Noblesville, Ind.
Thesis, "Tetanus."

1839 R. T. Wilson, Rowe, Ind., 1st yr.
Preceptor—Dr. Johnson.
Benjamin Rush Mitchell, Lexington, Ky., 3rd yr.
Preceptor—Prof. Mitchell.

Year	Name of Student	Address
1840	Richard Depew,	Indianapolis, 1st yr.
	Preceptor—Dr. W. T. S. Cornett.	
	Thesis, "Drunkenness."	
	John Flanagan,	Edina, Ind., 1st yr.
	Preceptors—Dr. Jacobs and Dr. Esterly.	
	James D. Maxwell,	Bloomington, Ind., 1st yr.
	Preceptor—Dr. David H. Maxwell.	
	Joseph G. McPheeter,	Bloomington, Ind., 2nd yr.
	Preceptor—Dr. Maxwell.	
	Thesis, "Bandage."	
	W. R. Nafsinger,	Ladoga, Ind., 1st yr.
	Preceptor—Prof. Cross.	
	Isaac A. Peeters,	Broadnax, Ind., 1st yr.
	Preceptor—E. Franks, M.D.	
	W. C. Smydth,	Bloomington, Ind., 1st yr.
	Preceptor—Dr. W. C. Foster.	
	L. S. Spore,	Carlisle, Ind., 1st yr.
	Preceptor—Dr. G. G. Barton.	
1841	Benj. A. Allison,	Spencer, Ind., 1st yr.
	Preceptor—Dr. A. Joslin.	
	*Livingston Dunlap,	Indianapolis.
	Honorary M. D. degree.	
	Benjamin Rush Mitchell,	Lexington, Ky., Practitioner.
	Williamson D. Dunn,	Bloomington, Ind., 1st yr.
	Preceptor—J. G. McPheeters, M.D.	
	Andrew Furman,	LaPorte Co., 1st yr.
	Preceptor—Dr. Henry Jones.	
	Lee Hazelwood,	Salem, Ind., 1st yr.
	Preceptor—Dr. Samuel Reid.	
	Harvey D. Henderson,	Salem, Ind., 1st yr.
	Preceptor—Samuel Reid, M.D.	
	Gilbert C. Milligan,	Leesville, Ind., 1st yr.
	Preceptor—J. C. Cavens, M.D.	
	Jacob C. P. Negley,	Indianapolis, 1st yr.
	(Now at Louisville); Preceptor—David N. Negley, M.D.	
	Samuel A. Rariden,	Salem, Ind., 1st yr.
	Preceptor—Dr. Samuel Reid.	
	Samuel Reid, M.D.,	Salem, Ind.
1842	F. Crumbaugh,	Madison, Ind., 1st yr.
	Preceptor—Joseph G. Norwood, M.D.	
	Barnaby Edmonds,	LaPorte, Ind., 1st yr.
	Preceptor—T. Jeffreys, M.D.	
	Benjamin Rush Mitchell,	Lexington, Ky., Practitioner.
	Harvey D. Henderson,	Salem, Ind., 2nd yr.
	Preceptor—Samuel Reid, M.D.	
	Thesis, "Intermittents."	
	Seth Hobbs,	Salem, Ind., 1st yr.
	Preceptor—E. Alberson, M.D.	
	Alfred Pugh,	Westpoint, Ind., 1st yr.
	Preceptor—Andrew Mills, M.D.	
	Isaac Watson, Jr.,	Millville, Ind., 1st yr.
	Preceptor—E. Pettus, M. D.	
1843	*F. Crumbaugh,	Madison, Ind., 2nd yr.
	Preceptors—Samuel Reid, M.D. and Dr. J. G. Norwood.	
	Thesis, "External Medication."	
	John R. Cummins,	Madison, Ind., 1st yr.
	Preceptor—Jos. H. D. Rogers, M.D.	
	Thos. W. Fry,	Crawfordsville.
	John W. Gatewood,	Madison, Ind., Practitioner.
	Dr. S. E. Leonard,	Indiana.
	Honorary M.D. degree.	
	A. M. Murphy,	Carlisle, Ind., 1st yr.
1844	M. B. Brown,	New Harmony, Ind., 1st yr.
	Preceptor—J. S. Mann, M.D.	
	*B. Rush Mitchell,	Madison, Ind., 4th yr.
	Practitioner; Thesis, "Diagnosis."	
	*Alcy M. Murphy,	Carlisle, Ind., Practitioner, who had formerly attended Louisville Medical School.
	Thesis, "Congestive Fever."	
1845	Thomas Lang,	Vevay, Ind.
	Preceptor—Dr. McCutcheon.	
1846	G. D. Jaquess,	Poseyville, 1st yr.
	Preceptor—Dr. Cloud.	
1847	John G. Beck,	Bono, Ind., 1st yr.
	Preceptor—Dr. Dunn.	
	Wm. Nelson Duzan,	Eaglevillage, Ind., Practitioner.
	Thesis, "The Practice of Medicine."	
	J. J. Saddler,	Washington, Ind., 1st yr.
	Graduate of Kemper Co., Mo.	
1848	Geo. N. Duzan,	Eaglevillage, Ind.
	Thesis, "Inflammation."	
	N. Field,	Jeffersonville, Ind., Practitioner.
	George D. Jaquess,	Petersburg, Ind.
	Thesis, "Bilious Remittent Fever."	
1849	*Dr. Luke Munsell,	Indiana.
	Honorary M.D. degree.	
1850	W. S. Riley,	Orleans, Ind., 1st yr.
	Preceptors—Dr. Riley and Dr. Hoover.	
1852	Stuart F. Coffman,	Greenville, Ind., 2nd yr.
	Preceptors—Dr. Girdner and Dr. Link.	
	Thesis, "Typhoid Fever."	
1854	Wm. H. Ball,	Indiana, Practitioner.
	Thesis, "Typhoid Fever."	
	Daniel H. Kimberlin,	Indiana, 1st yr.
	Preceptor—Dr. H. C. Coons.	
	James D. McPheeters,	Livonia, Ind., 1st yr.
	Preceptor—Dr. M. Kimball.	
	Daniel Neal,	New Harmony, Ind., 1st yr.
	Preceptor—Dr. F. A. Mott.	
1855	Andrew B. Robertson,	Rome, Ind., 2nd yr.
	Practitioner.	
1856	Wm. H. Ball,	Indiana, Practitioner.

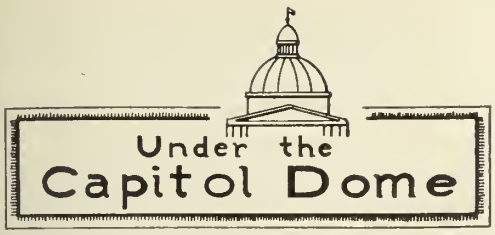
Transylvania Medical College closed its doors February 1, 1859, graduating six students that year.

At the end of the register is to be found the following pathetic comment, "and so ended the first cycle of the Medical Department of Transylvania University. Robert Peter, Dean, Commencement, February 1, 1859."

Not only was this the end of the first cycle; this historic medical school never reopened.

In a subsequent article biographies of as many of the graduates and students who attended Transylvania will be published as are available. Any information concerning the physicians in the above list will be appreciated.

* Graduate.



MEETING OF BOARD OF MEDICAL REGISTRATION AND EXAMINATION

The Indiana State Board of Medical Registration and Examination met March 22 at a reconvened session of the regular January meeting.

Included among items for consideration by the board were reports of Dr. J. W. Bowers of Fort Wayne and Dr. William R. Davidson of Evansville, on the meeting of the Federation of Medical Boards of the United States held in Chicago, February 18 and 19. The two board members and Miss Ruth V. Kirk, clerk of the board, attended the conference.

The board also will consider the application of Clarence J. Myler, a chiropractor of LaGrange, to be re-licensed to practice chiropractic. His license was suspended in 1934 after he was convicted on a charge of criminal assault. He was sentenced to serve a term at the Indiana state prison at Michigan City.

* * *

COST OF OPERATING STATE INSTITUTIONS

Operation of state institutions for care, treatment, and education of mental and physical defectives cost Indiana a total of $2,101,028.64 during the fiscal year 1933, for which statistics are now available.

This expenditure includes funds spent for maintenance, repair, new buildings and lands for the five hospitals for the insane; the Fort Wayne state school and Muscatatuck colony for feebleminded at Butlerville, the village for epileptics at Newcastle, the state sanitorium at Rockville, and the state schools for the blind and the deaf in Indianapolis.

Costs of the various individual institutions were:

Central Hospital—Maintenance, $289,979.83; repairs, $17,626.85; buildings and lands, $86,932.66; total, $394,539.34.

Logansport State Hospital—Maintenance, $191,977.13; repairs, $10,049.85; buildings and lands, $93,350.95; total, $295,377.93.

Richmond State Hospital—Maintenance, $167,655.21; repairs, $25,218.95; buildings and lands, $9,815.88; total, $202,690.04.

Evansville State Hospital—Maintenance, $90,845.93; repairs, $2,450.36; total, $93,296.29.

Madison State Hospital—Maintenance, $219,067.63; repairs, $9,350.20; buildings and lands, $1,507.31; total, $229,925.14.

Fort Wayne State School and Muscatatuck Colony—Maintenance, $263,771.58; repairs, $29,334.37; buildings and grounds, $143,476.05; total, $436,582.

Village for Epileptics—Maintenance, $150,088.11; repairs, $31,939.79; buildings and lands, $3,272.90; total, $185,300.80.

School for the Deaf—Maintenance, $119,663.47; repairs, $4,020.93; total, $123,684.40.

School for the Blind—Maintenance, $45,806.75; repairs, $1,378.52; total, $47,185.27.

State Sanitorium—Maintenance, $89,386.66; repairs, $3,061.57; total, $92,448.23.

* * *

EVAPORATED MILK FOR FAMILIES ON RELIEF

Mrs. Areva Hadley, state nutrition director of the Governor's Commission on Unemployment Relief, has announced that evaporated milk now is being distributed to families on relief. This, she said, is being supplied in addition to the dry skim milk which is to be allocated to the state as a means of adding certain vitamins and minerals to deficient diets.

Mrs. Hadley said that a survey by the consumer's council has revealed that less milk is being purchased by the average relief family than even a restricted diet allows.

The evaporated milk is being distributed by the commission through the facilities of the Federal Surplus Relief Corporation and Mrs. Hadley said its use is being urged for cooking as a supplement to fresh milk.

* * *

SEEDS DISTRIBUTED BY G. C. U. R.

Ten staple vegetables comprise the seed packets prepared by the Governor's Commission on Unemployment Relief for spring planting by indigent families in food relief gardens.

Distribution is under direction of H. E. Young, director of the division of gardens and food conservation of the commission. The seeds have been selected of vegetables known to give satisfactory results throughout the state. Each package will include one pound of stringless green pod beans; one-half pound of Kentucky Wonder beans; one ounce of Crosby's Egyptian beets; one-half ounce of Danver's half long carrots; one-third ounce of Grand Rapids lettuce; one-fourth ounce of scarlet globe radishes; one-fourth ounce of white icicle radishes; one-fourth ounce of Lucullus Swiss chard; one pound of white variety sweet corn, and one-half ounce of purple top white globe turnips.

Seeds for mass production gardens also will be made available through county work directors. In supplying these seeds it is the intention of the commission for all families on relief to produce food for their own support and to enlarge their diet to include garden vegetables.

REDUCTION IN AUTOMOBILE FATALITIES

A reduction in automobile fatalities is one of the results of wider shoulders and culverts along state highways, according to James D. Adams, chairman of the highway commission. Consequently, this work is of the utmost importance to every community of the state, he said.

Mr. Adams asked the cooperation of individuals and communities in obtaining right-of-way for a continuation of the highway widening program.

"The greater safety of wider shoulders and culverts is shown by the reduction in the number of motorists killed and injured on highways where widening has been done," Mr. Adams said. "In 1934, sixteen were killed and nineteen injured in motor vehicles on widened sections of eleven heavily traveled state highways. In 1933, before these sections were widened, twenty-nine were killed and twenty-seven injured.

"These results are more impressive in contrast with the state-wide increase of eleven per cent in motor vehicle accident fatalities in 1934 over 1933. This increase for Indiana is considerably under the average of over sixteen per cent for the United States," Mr. Adams said.

SECRETARIES' COLUMN

HAVE YOU, as secretary of your county medical society, digested the report of the special meeting of the House of Delegates of the American Medical Association which was held in February? The report was printed in the March JOURNAL. Be sure to read it.

The 1935 session of the legislature has adjourned. How many of you secretaries have sent letters of thanks to your legislators who helped to keep down legislation against the medical profession? If you haven't written to them, you should.

Have you collected all the dues from your county?

Is every eligible M. D. in your county a member of your society?

Form a membership committee now—and get busy.

How many of you have studied the Moore bill and the Lundstrom bill in Congress? They are vicious, and you should protest against them.

A. M. MITCHELL, M. D., *Chairman.*

DIPHTHERIA REPORT FOR FEBRUARY 1935

There were ten deaths from diphtheria during the month of February, making a total of eighteen deaths for the year so far. This total is five under the smallest number ever recorded at this same time of the year. Another encouraging fact is that out of the ten deaths there was only one child of school age. It appears that the school children because of immunization, and also because of the fact that they are older, are coming to be pretty well protected. There was one person aged sixty-two, and also there was one aged six months, indicating the extremes of ages, and also indicating that six months is not too early to give some thought to immunization.

Marion County had four deaths. Last month it reported three, making a total of seven deaths for the first two months of the year. Allen County had one death during February, making a total of three deaths for the year. Lawrence County reported one death during February, bringing its total to two for the year. Apparently these three counties are in special need of close attention. Allen County has had diphtheria for years; Lawrence County had by far the highest death rate from this disease in Indiana for last year; Marion County wishes to be regarded as an up-to-date community.

A resume of the deaths reported for the month of February, 1935, and for the first two months of the current year is given below.

County	No. Deaths February 1935	Total for 1935
Allen	1	3
Bartholomew	1	1
Delaware	1	1
Fayette	0	1
Lawrence	1	2
Lake	1	1
Madison	1	1
Warrick	0	1
Marion	4	7
Total	10	18

Thurman B. Rice, M. D., *Chairman,*
Diphtheria Prevention Committee.

Report of Legislative Committee

(Continued from page 199)

S. B. 109. Requires health departments to file reports of births and deaths with county clerks as well as the State Board of Health. As this would only mean duplication of work, the health committee in the Senate did not pass this bill out. Finally withdrawn by author.

S. B. 130. Poison bill. Restricts sales of certain poisonous drugs to drug stores and professional men. This also provides for proper labeling of lye containers. Passed Senate, killed in House.

S. B. 275. Enabling act whereby the State of Indiana takes advantage of federal funds offered by the Wanger-Lewis bill for the care of crippled children, maternal welfare, etc. This bill was withdrawn but probably will be up for consideration at special session.

S. B. 185. Prohibits a hospital from denying immediate members of family of the patient in a private room access thereto at any time. This has been amended to protect the physician. Passed Senate. Died in House.

H. B. 82. Provides for the establishment of a tuberculosis hospital in southern Indiana (companion bill for S. B. 234). Passed House. Not acted upon in Senate. As a slight increase in tax levy would be necessary, this bill was held up until special session.

H. B. 113. Authorizes the State Board of Pharmacy to appoint narcotic inspectors to assist federal inspectors. This is needless and duplicating legislation. Postponed indefinitely.

H. B. 236. A poison bill, providing that labels in red letters bearing the word "Poison" shall be placed on containers. Withdrawn.

H. B. 387. A lien bill for hospitals and physicians, effective in automobile accident injuries. Repeals 1933 act which gave right to hold junior liens by hospitals. Killed in House.

S.B. 304 (Miller). Provides for castration of persons charged with certain felonies where after a hearing it is determined such action is the only method to curb the tendency to commit such offense. Postponed in Senate.

H.B. 459 (Lee). Would allow any one to practice podiatry. Died in committee.

H.B. 487 (Rozskowski). Eugenics bill. Held in committee.

H.B. 561 (Patterson). Limited sale and distribution of prophylactics and contraceptives to physicians and pharmacists. Withdrawn.

Before the legislature convened, the hospitals, physicians, dentists, nurses and insurance groups sponsored the preparation of a bill which would provide for the use of state highway funds to pay for services rendered in automobile accident cases. Although the Governor and members of the legislature felt that something should be done to remedy the present situation, no one desired to divert state highway funds for that purpose. At the request of the Governor, data in regard to the number of automobile accident cases which result in financial loss to hospitals, nurses, and physicians has been filed along with a brief on the subject, with the Governor, who hopes to be able to take care of these cases in his general relief program, which will be brought before the special session.

Legislative Committee

O. T. Scamahorn, chairman, Pittsboro

George Daniels, Marion; F. H. Jett, Terre Haute; L. E. Fritsch, Evansville; John A. Aspy, Indianapolis; John C. Glackman, Rockport; George Dillinger, French Lick.

DEATH NOTICES

Lynn H. Harrison, M. D., of Butler, died February twenty-second, aged sixty-three years. Dr. Harrison had practiced medicine in Butler for thirty-two years. He graduated from Barnes Medical College, St. Louis, in 1895.

Charles H. Spurgeon of Terre Haute died March first, aged fifty-four years. Dr. Spurgeon was a member of the Vigo County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the Indiana University School of Medicine, Bloomington and Indianapolis, in 1923.

Abraham L. Preston, M. D., of Brookville, died February twenty-third, aged seventy-four years. Dr. Preston was a graduate of the Medical College of Indiana, Indianapolis, in 1884.

John W. Vizard, M. D., of Pleasant Mills, died February twenty-eighth, aged sixty-five years. Dr. Vizard was a former state legislator and had served as Adams County health officer for many years. He was a member of the Adams County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the National Normal University, College of Medicine, Lebanon, Ohio, in 1892.

David M. Bonham, M. D., of Mulberry, died February fifteenth, aged eighty-seven years. Dr. Bonham graduated from the Eclectic Medical College of Cincinnati in 1875.

Lee H. Tully, M. D., of Evansville, died February twenty-first, aged sixty-five years. Dr. Tully was an eye, ear, nose and throat specialist and had practiced in Evansville for twenty-five years. He was a member of the Vanderburgh County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Louisville Medical College, Kentucky, in 1890.

Leslie A. Kuhn, M. D., of Wyatt, died March thirteenth, aged fifty-seven years. Dr. Kuhn was a Spanish-American and World War veteran. He graduated from the Jenner Medical College, Chicago, in 1906, and was a member of the St. Joseph County Medical Society, the Indiana State Medical Association and the American Medical Association.

WILLIS E. HOSMAN, M. D., of Akron, died March eighteenth, aged sixty-six years. Dr. Hosman was president of the Akron town board at the time of his death. He was a member of the Fulton County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the Eclectic College of P. and S., Indianapolis, in 1892.

CLIFFORD H. KING, M. D., died March fifteenth, at his home in Wabash. Dr. King was seventy-six years of age. He graduated from Rush Medical College, University of Chicago, in 1881. Dr. King had retired from active practice.

CHARLES E. MCCORD, M. D., of Fortville, died March nineteenth in Greenfield, where he had gone to attend a medical society meeting. Dr. McCord had practiced medicine in Fortville and Hancock County for forty years. He graduated from the Medical College of Indiana, Indianapolis, in 1895, and was a member of the Hancock County Medical Society, the Indiana State Medical Association, and the American Medical Association.

HOOSIER NOTES

A DEPARTMENT of dentistry soon will be added to the Indianapolis Methodist Hospital.

DR. PHILIP CORBOY of Valparaiso has gone to Europe for three months to do postgraduate work.

THE Psi Iota Xi sorority has placed at the disposal of Steuben County physicians a McKesson oxygen tank.

JAMES H. MORONEY of Winchester celebrated the fiftieth anniversary of his graduation from medical college March fourth.

DR. J. E. BIRD of New Albany has been vacationing with his family in Florida, and recently reported the catch of a seven-foot sailfish.

DR. ERSKINE SOMERS, who left Decatur about a year ago, has located at Waynedale, near Fort Wayne, where he will practice after April first.

DR. CARL B. SOUTHARD has returned to his practice at Russiaville after recovering from injuries received in an automobile accident in January, 1933.

DR. H. C. WALLACE of Chicago has moved to Crawfordsville, where he will enter into a partnership with Dr. George Collett in the practice of surgery.

DR. FLOYD GRANDSTAFF of Decatur has been made Adams County health officer, to succeed Dr. J. W. Vizard of Pleasant Mills, who died February twenty-eighth.

DR. J. L. ALLEN of Greenfield has been made head physician at the Indiana State Reformatory at Pendleton. Dr. Allen has been assistant physician at the reformatory for the past year.

THE Association of Medical Record Librarians of Indiana met March second at Ball Memorial Hospital in Muncie. Mrs. M. Ellen Tracy, librarian of the Indiana University Hospitals, is president of the association.

THE annual meeting of the American Association on Mental Deficiency will be held at the Hotel Palmer, Chicago, April 25, 26, and 27. Complete program may be obtained from the secretary, Dr. G. B. Smith, Godfrey, Illinois.

DR. CHESTER A. STAYTON of Indianapolis was elected state president of the Phi Beta Pi at the meeting held in Indianapolis in March. Other officers elected are Dr. Roy Geider, vice-president, and Dr. Lester Bibler, secretary.

THE first meeting of the newly organized Indiana Pediatric Society was held in Indianapolis, March thirteenth. Officers elected are Dr. Louis H. Segar, Indianapolis, president; Dr. R. A. Craig, Kokomo, vice-president; Dr. Matthew Winters, Indianapolis, secretary. At the dinner meeting in the Columbia Club, Dr. Henry O. Mertz, of Indianapolis, read a paper on urological disorders in children. The next meeting of the Society will be held in South Bend next fall.

THE United States Civil Service Commission has announced open competitive examination for Junior Graduate Nurse, applications for which position must be on file with the commission at Washington, D. C., not later than April fifteenth. Full information may be obtained from the secretary of the United States Civil Service Board of Examiners at the post office or custom house in any city which has a post office of the first or second class, or from the United States Civil Service Commission, Washington, D. C.

THE eighth annual meeting of the Indiana Roentgen Society was held at the Indianapolis Athletic Club, February twenty-second. Dr. B. H. Nichols of the Cleveland Clinic, Cleveland, Ohio, addressed

the society. The following officers were elected: President, Dr. D. C. McClelland, Lafayette; president-elect, Dr. E. M. VanBuskirk, Fort Wayne; vice-president, Dr. P. D. Moore, Muncie; secretary-treasurer, Dr. J. N. Collins, Indianapolis. A resolution passed at this meeting is printed in full under "Societies and Institutions" in this issue.

The Kentucky State Medical Association advises us that the following announcement applies to members of the Indiana State Medical Association, and extends a most cordial invitation to our folks to spend a week in this hospital. No doubt many of our southern Indiana members will be glad to avail themselves of this opportunity.

The next postgraduate course in pediatrics under the auspices of the American Academy of Pediatrics will be held in the Children's Free Hospital, in Louisville, on each Wednesday, for ten weeks, beginning April 24th. The course will consist of lectures and practical demonstrations of the new methods of transfusion by hypodermoclysis, intravenous and intra-peritoneal medication, blood and urine tests, etc. Interesting bedside cases will also be demonstrated. The fee for the course will be $5 and any one interested should write directly to Dr. Philip F. Barbour, chairman, for any further information.

AMERICAN MEDICAL GOLFING ASSOCIATION

The American Medical Golfing Association will hold its twenty-first annual tournament at the Northfield Country Club in Atlantic City on Monday, June 10, 1935. Thirty-six holes of golf will be played in competition for the seventy trophies and prizes in the nine events. There are A. M. G. A. members in every state of the Union. Dr. Charles Lukens of Toledo is president of the association which was organized in 1915 and now totals 1,100 members. The Atlantic City committee is under the chairmanship of Dr. Walt P. Conaway, 1723 Pacific Avenue, Atlantic City. The tournament will be played at the Northfield Country Club. All male Fellows of the American Medical Association are eligible and cordially invited to become members of the A. M. G. A. Application blanks may be obtained from the executive secretary, Bill Burns, 4421 Woodward Avenue, Detroit. Participants in the tournament are required to supply their home club handicap, signed by the secretary.

NORTHERN TRI-STATE MEDICAL MEETING

The Northern Tri-State medical meeting will be held at Lima, Ohio, April ninth, at the Quilna Theater. Speakers at the morning session will be:

Dr. John W. Moore, Louisville, Kentucky. Subject: "Studies on the Circulation in Cases of Hypertension."

Willard Bartlett, Sr., M. D., St. Louis. Subject: "Lessons Derived from a Five-Year Mortality Study."

R. L. Schafer, M. D., Detroit, Michigan. Subject: "Classification and Diagnosis of Dwarfism, and Therapeutics Results with the Pituitary Growth Hormone."

B. H. Nichols, M. D., Cleveland, Ohio. Subject: "Roentgenological Aspect of Kidney and Ureter Tumors."

R. W. Waggoner, M. D., Ann Arbor, Michigan. Subject: "Diagnosis of Cerebral Lesions, or the Diagnosis of Brain Tumors."

Speakers for the afternoon session will include:

Irving W. Potter, M. D., Buffalo, New York. Subject: "The Porro Operation in Obstetrics."

R. Wesley Scott, M. D., Cleveland, Ohio. Subject: "The Heart After Forty."

Martin H. Fisher, M. D., Cincinnati, Ohio. Subject: "Diagnosis and Treatment in the Nephritides."

Alan Brown, M. D., Toronto, Canada. Subject: "Errors in Diagnosis and Therapy in Pediatrics."

Ralph A. Kinsella, M. D., St. Louis. Subject: "Chronic Arthritis."

Max Cutler, M. D., Chicago, Illinois. Subject: "The Present Position of Radiation in the Treatment of Cancer."

Emil Novak, M. D., Baltimore, Maryland. Subject: "Recent Advances in Gynecological Endocrinology."

Officers of the association are Dr. H. E. Randall, Flint, Michigan, president; Dr. E. P. Gillette, Toledo, Ohio, vice-president; Dr. G. E. Jones, Lima, Ohio, secretary; Dr. P. N. Sutherland, Angola, treasurer; and Drs. Charles Lukens of Toledo, Ohio, W. H. Marshall of Flint, Michigan, and G. O. Larson of LaPorte, Indiana, councilors.

Indiana physicians are invited to attend the meeting.

INDIANA UNIVERSITY NEWS NOTES

Theta Kappa Psi, honorary medical fraternity at Indiana University, held initiation services March 2 at the Hotel Lincoln, Indianapolis, for the following pledges: Robert Speas, Whiteland; Donald Ladig, Fort Wayne; Lloyd Good, Indianapolis; Theodore Toth, Whiting, and Robert Bridgeford, South Bend.

Dr. R. C. Williams of the United States Public Health Service was the principal speaker at a banquet following the induction ceremony. A formal dance was held at the Hotel Lincoln after the banquet.

In speaking before a recent meeting of the Indiana University Council, Dean W. D. Gatch, dean of the I. U. School of Medicine at Indianapolis,

explained that if preventive medicine were abandoned in the United States for a period of ten years, the entire country would be ravaged by bubonic plague, malaria and other contagious diseases. He pointed out that medicine, a very recent development, concerns civilization more than any other science. "It is a field so complex and extensive that it is utterly impossible for one man to master every subject," Dean Gatch said. "A doctor's education is never completed. He constantly must be able and capable of applying new methods to new problems which he may confront. Medicine is developing so rapidly that it becomes antiquated within the course of a few years."

Sixteen students of the Indiana University School of Medicine at Bloomington were initiated into the Nu Sigma Nu, honorary medical fraternity, Saturday, March 9, in Indianapolis. The initiation services were held at the Lincoln Hotel. A post-initiation banquet was held with Dean B. D. Myers and Dean W. D. Gatch, of the medical school, officiating.

Students initiated were as follows: Rudolph Myers, Bloomington, president of the pledge group; Lester Baker, Aurora; John S. Atwater, Indianapolis; Edward Smith, Petersburg; Robert Acher, Terre Haute; Thomas A. Gill, Michigan City; Richard Schug, Decatur; Keith Hammond, French Lick; Ben Siebenthal, Bloomington; Arthur Adams, West Lafayette; Stanley Garner, Indianapolis; William Montgomery, Plymouth; George House, Indianapolis; Edwin Trook, Marion; Karl Mast, Angola, and William Rossman, Cairo, Ill.

The Indiana Chapters of the Delta Theta Tau, social and philanthropic sorority, have donated a therapeutic light department to the James Whitcomb Riley hospital of the Indiana University medical center, Indianapolis. Sections of the department will be located at the Rotary Convalescent wing and at the main hospital.

Mrs. Gladys Hall Silkey, dietitian in the Indiana University hospitals, Indianapolis, has been granted a year's leave of absence during which time she will act as an advisor in the establishing of a training course for student dietitians at Firmin Desloge hospital and the St. Mary's hospital. These hospitals are affiliated with the University of St. Louis. Mrs. Silkey was recommended for this position by the executive committee of the American Dietetic Association and was chosen for it from a large number of applicants.

A total of 82.8 per cent of the 1934 graduates of Indiana University are employed in remunerative work or are continuing their education, working for advanced degrees, according to a survey completed this month by the University. There were 985 students who received degrees from the University in 1934, and 816 of these are either employed or in school. Of this 816, 656 or 66.6 per cent are holding positions, while the remaining 160 or 16.2 per cent are continuing their education.

Only 10.2 per cent or 100 members of the 1934 graduating class are unemployed, according to the survey. A total of 69 graduates or 7 per cent failed to reply to the questionnaire.

A preliminary survey made a few months ago of three professional schools of the University showed that 97 per cent of the 1934 graduates of these schools have been placed in desirable work.

BOOK REVIEWS

BOOKS RECEIVED

A TEXTBOOK OF SURGERY, For Students and Physicians. By W. Wayne Babcock, A. M., M. D., LL. D., F. A. C. S., Professor of Surgery and of Clinical Surgery in The Temple University; Surgeon to The Temple University Hospital and to the Philadelphia General Hospital, Chief of the Surgical Service, U. S. General Hospital No. 6, 1917-1919. Second Edition, Rewritten. 1312 pages with 1032 illustrations and 8 plates in color. Philadelphia and London: W. B. Saunders Company, 1935. Cloth, $10.00 net.

* * *

THE NERVOUS PATIENT. By Charles Phillips Emerson, M. D., Research Professor of Medicine, Indiana University, Indianapolis. 453 pages. Cloth. Price $4.00. J. B. Lippincott Company, Philadelphia and London, 1935.

* * *

MARTINI'S PRINCIPLES AND PRACTICE OF PHYSICAL DIAGNOSIS. Edited by Robert F. Loeb, M. D., Associate Professor of Medicine, College of Physicians and Surgeons, Columbia University. From the authorized translation by George J. Farber, M. D. 213 pages; 30 illustrations. Cloth. Price $2.00. J. B. Lippincott Company, Philadelphia, 1935.

* * *

MEDICAL CLINICS OF NORTH AMERICA. Issued serially, one number every other month. Volume 18, Number 3. New York Number—November, 1934. Octavo of 301 pages with 17 illustrations. Per clinic year July, 1934, to May, 1935. Paper, $12.00; Cloth, $16.00 net. Philadelphia and London. W. B. Saunders Company, 1934.

* * *

GOULD'S MEDICAL DICTIONARY. The Words and Phrases Generally Used in Medicine and the Allied Sciences, with their Pronunciation and Derivation. By George M. Gould, A. M., M. D., author of "An Illustrated Dictionary of Medicine, Biology, and Allied Sciences," etc. Edited by R. J. E. Scott, M. A., B. C. L., M. D., and C. V. Brownlow. Fourth revised edition. 1,538 pages with illustrations and 174 tables, including new tables of prefixes and suffixes; the tables of bacteria, metazoa and protozoa pathogenic to man and animals, by D. H. Bergey, M. D., late professor of hygiene and bacteriology, University of Pennsylvania; also the international table of the causes of death. Flexible binding. With thumb index, $7.50; without thumb index, $7.00. P. Blakiston's Son and Company, Inc., Philadelphia, 1935.

* * *

BOOKS REVIEWED

PRACTICAL OBSTETRICS FOR STUDENTS AND PRACTITIONERS. P. Brooke Bland and Thaddeus L. Montgomery. Second Edition. 730 pages. Price $8.00. F. A. Davis Company, Philadelphia, 1934.

This is the second edition of this book in two years. It has kept up with recent opinions and although it gives especially the teachings of the Department of Obstetrics in the Jefferson Medical College, it gives due attention to

the literature from all parts of the world. The endeavor of the authors is to provide "for the student a concise text book, the practitioner a dependable guide and the specialist an exposition of our personal views on current obstetric problems."

The discussions are not verbose and although space in the text is not taken up with discussion of varied opinions, a section of thirteen pages is given to reference reading.

There are 516 engravings with 21 colored plates. The pictures are sufficient to make very clear what is taking place. They illustrate especially physiological and pathological processes rather than only operative techniques. The illustrations of placenta praevia and abortion are especially good. The physiology of reproduction is carefully brought up to date.

The arrangement of chapters is not consistent or logical and might confuse a student somewhat, but for the clinician, reference is perhaps of little importance. The diction is good. For instance, in speaking of forceps operation, how could one find better words with which to admonish users of forceps than "exquisite care."

Treatments are given concisely, many in outline form. The bougie is recommended as an efficient form of inducing labor. All the types of Cesarean section are described. Preference is given to the classical in clean cases and the low cervical procedure in auspiciously infected cases. Considering the easy convalescence of the low type of section it would seem that the low type should be used in any case that needs section. The Potter method of version is well described and pictured.

Infiltration anaesthesia is not described for the normal labor as would seem deserving. Spinal anaesthesia has for them proven the most dangerous method of all.

Eclampsia is fully covered and the opinion given that "Eclampsia is no longer regarded as a surgical emergency, nor is it to be treated as such. Experience has demonstrated that the results of a conservative plan are far superior to any type of hurried operative delivery." The chapter on puerperal infection is long and complete as it deserves to be.

There is a chapter on disorders and diseases of the newborn and one on obstetric jurisprudence.

All in all, this is a very attractive and practical book, well worth any physician's money.

* * *

NATURE'S WAY. The Fertile and Sterile Periods of Marriage. Victor C. Pedersen. G. P. Putnam's Sons. New York, 1934.

Now that "rhythm" has become a household word, we can expect a flood of books about it for public consumption. Strange as it may seem, many lay people and other professional people have read more about it than most practicing physicians.

This book is written for lay consumption. It is presented with less of sentimental nonsense than some of the books on the subject. Some of the physiology is quite doubtful. For a lay book, much of the as yet not definitely known glandular function could just as well be omitted.

The interpretation of the works of Knaus and Ogino is simply done. It is essentially this: assuming that ovulation occurs about the fourteenth day of the normal twenty-eight day cycle, pregnancy will take place only close to this time, and intercourse at other times is safe.

The difficulty is that the lay person, including priests, do not understand the physiology of women well enough, and when they try to work out such problems, they fall into error. Variations of menstruation complicate matters too much for them to figure out.

Like so many other problems involving medical subjects, the lay person is wise to consult his medical advisor when needing information of this sort. This also assumes that the physician has made himself familiar with all the complications of such a subject, at least more so than his questioner. It does the patient little good if his physician states that he has never heard of the subject.

PHYSIOLOGY IN HEALTH AND DISEASE. By Carl J. Wiggers, M. D., professor of physiology in the School of Medicine of Western Reserve University, Cleveland, Ohio. 1156 pages. Cloth. Price $9.00. Lea and Febiger, Philadelphia, 1934.

True to its title, this book discusses physiology in health and disease in such a manner that medical students, clinicians, and progressive practitioners will find probable explanations for many reactions so often accepted in an empirical way. The method of handling the subject matter as to tissues, organs, and systems makes the book very ready for reference. This book would lend itself readily to profitable review by a journal club or a group of physicians who have been out of school for the past fifteen years with limited opportunities to keep up with the latest developments in physiology. There is a splendid index and well-prepared and extensive bibliography.

* * *

THE HEART VISIBLE. A Clinical Study in Cardiovascular Roentgenology in Health and Disease. By J. Polevski, M. D., attending physician and cardiologist, Newark Beth Israel Hospital. 207 pages with 122 illustrations. Cloth. Price $5.00. F. A. Davis Company, Philadelphia, 1934.

No important medical book in the past few years has received such varied criticism from different reviewers as has this work. It is the first serious monograph on the subject, with which this reviewer is familiar, published since Vaquez' work in 1920. It was probably not intended by the author as a textbook for the skilled roentgenologist but rather as a guide to the "perplexed" among the internists. This latter function it fulfills admirably and emphasizes the importance of correlating x-ray and clinical methods. The one regrettable fault which the reviewer finds is a dearth of lateral and oblique views of the chest which are most difficult of interpretation. On the whole, it is well worth a place in the library of every internist and cardiologist.

SOCIETIES AND INSTITUTIONS

Allen County (Fort Wayne) Medical Society met at the Methodist Hospital, March fifth, with the program in charge of the staff. Clinical cases were reported. Miss Helen Teal, secretary of the Indiana State Nurses' Association, spoke on "The Eight-Hour Day for Private Duty Nurses." Four new members were voted into membership.

The Allen County (Fort Wayne) Medical Society met in the Chamber of Commerce, March nineteenth, to hear Dr. Walter M. Simpson of Dayton, Ohio, talk on "Progress in Artificial Fever Therapy Researches in Miami Valley Hospital."

* * *

Carroll County Medical Society met at Camden, February fourteenth, to hear Dr. Bennett Kraft of Indianapolis discuss "Clinical Manifestations of Allergy." A resolution opposing present health insurance plans was unanimously adopted.

* * *

Cass County Medical Society members met at St. Joseph's Hospital, Logansport, February fifteenth, with Dr. Floyd T. Romberger of Lafayette as the principal speaker. Dr. Romberger's subject was "Modern Concepts of Anesthesia." Attendance numbered twenty-five. At the March fifteenth meeting, Dr. R. L. Sensenich of South Bend presented an address on "Duodenitis."

* * *

Clark County Medical Society met at Jeffersonville, February nineteenth, for a discussion of the proposed sickness insurance bill.

CLINTON COUNTY MEDICAL SOCIETY met with the CARROLL COUNTY MEDICAL SOCIETY at Flora, March thirteenth. Subjects discussed included "The Medical Man of the Future" and "Surgical Diseases of the Gall Bladder." Attendance numbered twenty-four.

* * *

DAVIESS-MARTIN COUNTY MEDICAL SOCIETY met at Washington, February twenty-sixth, for a business meeting.

* * *

DEKALB COUNTY MEDICAL SOCIETY met at Auburn, February fifteenth, at noon with Mrs. Crandall as the principal speaker. Mrs. Crandall explained how social service is directing the expenditure of federal funds. A committee appointed to meet with the trustees made a report.

* * *

DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY members met at the Hotel Roberts, Muncie, February nineteenth, with an attendance of thirty-three. Drs. W. C. Moore, L. G. Montgomery, W. J. Quick, C. L. Botkin, and E. H. Clauser discussed "Health Insurance." The following five physicians were proposed by the society for honorary membership in the Indiana State Medical Association, inasmuch as each is eligible through age and number of years of membership in the society: Dr. George F. Ames, Eaton; Dr. Hugh A. Cowing, Muncie; Dr. T. J. Mansfield, Eaton; Dr. W. A. Spurgeon, Muncie; Dr. I. U. Trent, Muncie.

* * *

ELKHART COUNTY MEDICAL SOCIETY met in Elkhart, March seventh, with Dr. Joseph Miller of Chicago as principal speaker. Dr. Miller conducted a clinic, and a motion picture on spinal anesthesia was shown.

* * *

FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY met at the McFarlan Hotel, March twelfth, to hear Dr. M. F. McCarthy of Cincinnati talk on "Common Diseases of the Ear." Attendance numbered fourteen. Dr. W. D. Gatch of Indianapolis spoke on "Recent Advances in Abdominal Surgery" at the February twelfth meeting.

* * *

FLOYD COUNTY MEDICAL SOCIETY members met at New Albany, March eighth. Dr. William Winstandley of New Albany discussed "Epidemic Jaundice."

* * *

FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY met at Veedersburg, March seventh, with Dr. A. J. Fletcher of Danville, Illinois, as speaker. His subject was "Acute Abdominal Conditions in Infants and Children."

* * *

FULTON COUNTY MEDICAL SOCIETY held a meeting at Rochester, March twelfth. Dr. Frank Gastineau of Indianapolis was the speaker, his subject being "The Skin."

* * *

GREENE COUNTY MEDICAL SOCIETY met at Linton, March fourteenth. Dr. Henry Leonard of Indianapolis talked on "Gall Bladder Disease."

* * *

HAMILTON COUNTY MEDICAL SOCIETY members met in the public library at Carmel, March twelfth, to hear Dr. C. O. McCormick of Indianapolis talk on "Maternal Mortality." At the February twelfth meeting of this society dentists Harry Mayer and R. Benham talked on "Peridontia" and "Focal Infections."

* * *

HANCOCK COUNTY MEDICAL SOCIETY met at Greenfield, March eighteenth. Dr. James O. Ritchey of Indianapolis discussed "Respiratory Disturbances."

HENRY COUNTY MEDICAL SOCIETY members met February fourteenth at the Henry County Hospital. Dr. R. L. Amos and Dr. C. C. Bitler discussed "Present Conception of Arthritis" and "Vincent's Infection of the Lungs."

HENRY COUNTY MEDICAL SOCIETY met March fourteenth at the Henry County Hospital. Dr. Will Barnett of Logansport talked on "Circulatory Failure." Dr. W. U. Kennedy of Newcastle present a case report.

* * *

HOWARD COUNTY MEDICAL SOCIETY members were addressed by Dr. George J. Garceau of Indianapolis at the March first meeting, held in Kokomo.

* * *

HUNTINGTON COUNTY MEDICAL SOCIETY met March fifth at Huntington. Dr. Matthew Winters of Indianapolis talked on "New Conceptions and Prevention of Contagious Diseases of Children." Attendance was sixteen.

* * *

INDIANAPOLIS MEDICAL SOCIETY members heard Dr. Virgil H. Moon, former Indianapolis physician who now is professor of pathology at Jefferson Medical College, Philadelphia, speak on "The Shock Syndrome in Medicine and Surgery," March nineteenth, at the Athenaeum. This was a dinner meeting, the first the society has had for several years.

* * *

JASPER-NEWTON COUNTY MEDICAL SOCIETY members met at Goodland, March first. Dr. E. B. Ruschli of Lafayette presented a paper on "Management of Fractures of the Neck of the Femur."

* * *

KNOX COUNTY MEDICAL SOCIETY members met at Vincennes, February twelfth, with fourteen present. This was a general business meeting and round-table discussion of current matters of interest.

* * *

LAKE COUNTY MEDICAL SOCIETY met at the Gary Methodist Hospital, March fourteenth. The guest speaker of the evening, Dr. E. J. Berkheiser of Chicago presented an illustrated discussion of "Fractures In and About the Ankle." Dr. Maurice Buchsbaum of Gary discussed a case of "Adenosarcoma of the Suprarenal Gland."

* * *

LAPORTE COUNTY MEDICAL SOCIETY met at the Spaulding Hotel, Michigan City, February twenty-first, with Dr. Marshall Davison of Chicago as speaker. Dr. Davison's subject was "Recurrent Cholecystitis Following Cholecystostomy."

* * *

MADISON COUNTY MEDICAL SOCIETY members met with the dentists at the Anderson Hotel, March fourth. Dr. Gene J. Waldo, M. D., D. D. S., of Indianapolis, spoke on "Cervical Anginas." Attendance numbered thirty-five.

* * *

MONTGOMERY COUNTY MEDICAL SOCIETY members met at the Culver Hospital, Crawfordsville, February twenty-first, for a dinner meeting. Dr. John H. Warvel of Indianapolis talked about hospital records, with particular reference to their importance and aid in diagnosis. Attendance numbered twenty-four.

The March fourteenth meeting of this society was held at Culver Hospital, with twenty-two present. Drs. W. W. Dodds, L. H. Davis, and J. B. Griffith discussed "Coronary Diseases."

* * *

MUNCIE ACADEMY OF MEDICINE met March twelfth in the Hotel Roberts to hear Dr. M. Herbert Barker of Chicago discuss "Oxygen Therapy."

* * *

PARKE-VERMILLION COUNTY MEDICAL SOCIETY met at Clinton, February twentieth, with Dr. Frank Brayton of Indianapolis as principal speaker. His subject was "Common Skin Diseases."

Posey County Medical Society met at Tavern Inn, New Harmony February fourteenth. Dr. W. W. Hewin of Evansville discussed "Removal of Prostate by Newer Methods." Mrs. McFadden, FERA nurse, made her monthly report.

* * *

Putnam County Medical Society met at Greencastle, February twelfth, with Dr. R. A. Solomon of Indianapolis as speaker. Dr. Solomon's subject was "Diseases of the Heart—Diagnosis and Treatment."

* * *

Randolph County Medical Society members met at Winchester, March eleventh, to hear Dr. Bennett Kraft of Indianapolis discuss "Allergy."

* * *

Rush County Medical Society members heard Dr. H. B. Mettel of Indianapolis, February seventh, when the society met in Rushville. Dr. Mettel's topic was "Infant Feeding."

* * *

St. Joseph County Medical Society met at the Jefferson Plaza, South Bend, February nineteenth. Dr. Walter H. Baker was principal speaker, his subject being "Treatment of Fractures of the Spine." Thirty-eight members and one visitor were present.

At the February twenty-seventh meeting, Dr. Bailey of Chicago discussed "Treatment of Head Injuries." At this meeting sixty-four members and thirty-two guests were present.

On Tuesday, March fifth, twenty-six members of the St. Joseph County Medical Society heard Dr. Thomas Pauszak of South Bend discuss "Toxemia of Pregnancy." Dr. Merle E. Whitlock of Mishawaka was unanimously elected a member of the society.

On March fourteenth the society sent a letter of condolence to Mrs. Franklin H. Martin of Chicago, expressing sympathy in the loss of her renowned husband.

* * *

Shelby County Medical Society members met at the Strand Alcazar, Shelbyville, March sixth. Dr. J. O. Ritchey of Indianapolis discussed "Upper Respiratory Infections." Dr. Clyde Culbertson of Indianapolis assisted Dr. Ritchey by showing some slides.

* * *

Tippecanoe County Medical Society met at Lincoln Lodge, Lafayette, March fourteenth, with Dr. Walter Dean of Louisville, Kentucky, as principal speaker. Dr. Dean's subject was "Some Practical Considerations from an Ear, Nose and Throat Practice." A clinic was held at St. Elizabeth's Hospital in the afternoon.

* * *

Vanderburgh County Medical Society met at Evansville, February twelfth. Dr. Gardner Johnson read a paper on "Case of Chronic Tuberculous Empyema Treated by Thoracoplasty." Attendance numbered thirty.

The Vanderburgh County Medical Society met at Evansville March twelfth, to hear Dr. Dallas Fickas talk on "Acute Appendicitis Complicated by Liver Abscess." Attendance numbered twenty-two.

* * *

Vigo County Medical Society met at the Union Hospital, Terre Haute, March twelfth, with Drs. P. J. Bronson and D. A. Gerrish as speakers. Attendance numbered twenty-nine.

REPORT ON THE THIRTY-FIRST ANNUAL CONGRESS ON MEDICAL EDUCATION, HOSPITALS AND LICENSURE, FEBRUARY 18 AND 19, 1935, CHICAGO

(1) *Should the Number of Professional Students Be Restricted? Raymond Walters, Litt. D., President, University of Cincinnati.* The speaker cited estimates that in this country there is one lawyer for every 762 persons, one physician for every 852, one engineer for every 425, and one teacher for every 14.5 students. The lawyers increased 31% from 1920 to 1930. The engineers increased 15% from 1920 to 1930. The number of medical graduates increased 60% from 1923 to 1934. Dr. Walters stated the general opinion seemed to be that doctors should be distributed more widely in neglected rural and some urban areas; also that more doctors are needed in special lines, such as public health. He said quality rather than quantity should prevail in the professions; also that overcrowding of physicians encourages unethical practices.

(2) *The History of Medical Licensure. Henry E. Sigerist, M. D., Director, Institute of the History of Medicine, Johns Hopkins University, Baltimore.* Dr. Sigerist traced the development of medical licensure from medieval times when physicians had guilds.

(3) *The Larger Social Aspects of Medical Education. Willard C. Rappleye, M. D., Dean, Columbia University College of Physicians and Surgeons, New York.* The speaker stated that all forms of state insurance became enmeshed with politics. He predicted that 95% of medical service in the United States will eventually, in twenty to fifty years, be rendered by physicians in public service. He is not in favor of state medicine and said neither the medical profession nor the government is now prepared to administer it competently. However he stated that one-seventh of the nation's physicians now work on a salaried basis. He criticized the proposal for compulsory sickness insurance made by President Roosevelt's Committee on Economic Security. He said this country does not need such a system of sickness insurance as has been set up in England and Germany. The average American family, if it has any income at all, can pay the bills of the family doctor. What it needs is insurance covering the cost of severe illness. This can be met by hospital insurance. He also stressed the fact that quality of medical care goes down with excess in the number of doctors. He said that problems of preventive medicine cannot be handled adequately by the general practitioner.

One of the projects in the four billion dollar federal relief program is the erection of 300 hospitals in communities which lack adequate medical service. These communities being unable to support physicians, the government will have to provide medical service or subsidize physicians to locate there.

(4) *Report of the Council on Medical Education and Hospitals. Ray Lyman Wilbur, M. D., chairman.* He stated a survey of medical schools being carried on by the Council shows remarkable strength in basic science instruction and clinical departments but weakness in several specialties. Few schools have adequate teaching in psychiatry. Public health is also neglected.

(5) *Objectives of the Campaign against Tuberculosis. Kendall Emerson, M. D., Managing Director, National Tuberculosis Association, New York.* Dr. Emerson traced the campaign against tuberculosis from the first sanatorium established by Dr. Trudeau fifty years ago. In 1900 there were 600 beds for the care of the tuberculous. Now there are 80,000 beds for that purpose. The leadership in the national association has always been in the hands of the medical profession. However, the medical profession needed lay help, particularly in the health education. The first board of directors had 96 physicians and 4 laymen. At present two-thirds of the directors are physicians. The work has been mainly educational and supportive of public health agencies. Bovine tuberculosis control, anti-spitting campaigns, the importance of tuberculin testing and x-ray of the chest all have featured in the educational campaigns. Public health nurses and social workers have increased through the campaign efforts. Health education in the schools has greatly increased.

In 1900 the death rate from tuberculosis was 200 per 100,000. In 1934 it was 64 per 100,000. Tuberculosis has changed from first to seventh place as a cause of death, but it still leads between ages of 20 to 40. Early discovery has constantly been stressed as has segregation of positive cases. Research is being sponsored in several well-known institutions. The execution of the most important parts of the program depends on the general practitioner.

Dr. Henry C. Sweany of Chicago discussed Dr. Emerson's paper and said the medical profession must not relinquish con-

trol of this work. He also said the doctors have not kept up in the newer methods of treatment, and more attention should be given the subject in medical courses.

(6) *Education of Physicians in Tuberculosis. James Alexander Miller, M. D., Professor of Clinical Medicine, Columbia University College of Physicians and Surgeons, New York.* Dr. Miller said the usual graduate has an inadequate concept of tuberculosis. He stressed the value of history and proper x-ray to make early diagnosis. The physical signs often being late manifestations, medical students should have a wider opportunity for a prolonged study of cases. Serial x-rays should be available. A special chest service should be provided, including non-tuberculous lung conditions, adult and childhood types of tuberculosis, an out-patient department in which the student can see contact conditions in the homes, and also a surgical service showing newer methods of surgical treatment. Physical examination, x-ray interpretation and pathological exhibits all should be well coordinated. At Bellevue the fourth-year students of three medical schools spend four weeks on the chest service in groups of four. The chest unit has 180 beds and a turnover of 3,000 patients per year.

Dr. James J. Waring of Denver, Colorado, in discussing the paper warned against neglecting the physical examination in favor of the x-ray.

(7) *Some Historical Aspects of Tuberculosis. L. J. Moorman, M. D., Dean, University of Oklahoma School of Medicine, Oklahoma City.* Dr. Moorman traced the ravages of tuberculosis back to the code of Hammurabi written 2,000 B. C. in which evidence shows tuberculosis was prevalent in Babylonia. Bones of prehistoric man also show evidence of the disease. The modern conception and treatment of tuberculosis were initiated by Dr. Robert Koch's discovery of the tubercle bacillus in 1882.

(8) *Function of the General Hospital in the Treatment of Tuberculosis. J. A. Myers, M. D., Professor of Medicine, University of Minnesota, Minneapolis.* Dr. Myers recalled that in 1921 the House of Delegates of the American Medical Association recommended that general hospitals admit cases of tuberculosis. He estimated that there are 700,000 cases of clinical tuberculosis in the United States and about 80,000 sanatorium beds available. Ideas have changed about the necessity of sleeping out and it is now generally agreed that a well ventilated room is sufficient. Collapse therapy is the most important method of treatment in addition to the rest cure. Phrenic nerve surgery and extra pleural thoracoplasty also are important adjuncts in selected cases.

He stated that every general hospital should have a contagious service and should provide diagnostic facilities for suspicious cases. He said it is more economical and wiser to use general hospital beds for the treatment of tuberculosis than it is to build more sanatoria. He cited the Detroit plan of using 1,000 general hospital beds for the treatment of tuberculosis, the cases being placed under proper medical supervision. In two years the demand for beds had dropped to 500 and the morbidity is dropping 6% per year. He advocated further use of the tuberculin test and x-ray of the reactors by the general practitioner. Early diagnosis will then become the rule rather than the exception.

In a survey of medical graduates at Minnesota he found 5% who graduated from 1922 to 1931 had been tuberculin tested and x-rayed while 97% had this done who graduated in the last three years.

The National Tuberculosis Association made a survey of several hundred cases of tuberculosis and found 80% were first seen by the general practitioner and 51% finally diagnosed by them.

Two per cent were diagnosed by medical clinics; 8% by hospital physicians; 32% by tuberculosis clinics; 3% by tuberculosis specialists, and 4% by others.

(9) *Should the Radiologist, the Pathologist, and Anesthetist Be Licensed to Practice Medicine. William C. Woodward, M. D., director, Bureau of Legal Medicine and Legislation, American Medical Association.* Dr. Woodward said it is lawful for an unlicensed person to take x-ray, give anesthesia or prepare pathological sections, etc., by order of a physician. The interpretation of x-ray films and pathological sections must be by a physician. However, local custom and emergency situations are recognized by the law.

Dr. B. R. Kirklin of the Mayo Clinic said x-ray work should be done by a licensed radiologist.

Dr. J. P. Simonds, professor of pathology, Northwestern University Medical School, said pathological work should be under supervision of a licensed pathologist.

Dr. F. H. McMechan, secretary general, International Anesthesia Research Society, said anesthetics should be given by a trained physician anesthetist.

Dr. Karl A. Meyer, medical superintendent, Cook County Hospital, Chicago, said the surgeon needs cooperation from the expert radiologist and pathologist but routine anesthetics may be given by a well trained technician under the surgeon's supervision.

Dr. James S. McLester, president-elect of the American Medical Association, said the interpretation of x-ray and x-ray or radium therapy require a broad general medical knowledge and the same is true in pathological interpretations.

Dr. A. C. Bachmeyer, director of clinics, University of Chicago, said that much of the technical work in radiology and pathology can be done by well trained technicians but the interpretations made by especially trained physicians. Post mortems should always be performed by pathologists, and the well-trained anesthetist is best. But in some instances the best qualified anesthetist is a technician. He said the surgeon should be in control of the anesthesia in all cases.

Dr. A. T. McCormack, secretary of the Kentucky State Board of Health, said nurse anesthetists are licensed by examination in Kentucky.

(10) *Osteopathy and Licensure. Frederick Etherington, M. D., Dean, Queen's University Faculty of Medicine, Kingston, Ontario.* Dr. Etherington made a survey of the four leading osteopathic colleges in the United States. It showed that the osteopathic schools had inadequate facilities for proper medical instruction and their hospital and clinical facilities were also inadequate. He visited the largest and oldest osteopathic college at Kirksville, Missouri, and found the only hospital open to clinical instruction of 600 students had 15 bed patients and a somewhat larger number of out patients. Dr. Charles Hazzard, a New York osteopath, said the survey must have been hurried and incomplete. Dr. Etherington said it does not take long to size up a 15 bed hospital. Dr. Charles E. Humiston of Chicago suggested that the American Medical Association Council on Medical Education which is now making a survey of medical schools would be glad to include the osteopathic schools.

(11) *Extension Teaching in Medicine. Charles Gordon Heyd, M. D., Professor of Clinical Surgery, New York Post-Graduate Medical School.* Dr. Heyd predicted that within ten years 60% of medical practice in larger centers will be carried on in hospital dispensaries and clinics and physicians who now give this service free will be paid through tax funds. He also predicted that public funds will be necessary to prevent many private hospitals from closing.

Graduate medical teaching will have to consider the relation of medicine to the programs of old age pensions and sickness insurance.

The increased number of doctors who will be employed by the government will tend to bring into the ranks of salaried physicians the moderately trained type of doctor.

If costs of medical education rise and the average compensation of physicians falls, the natural tendency will be for physicians to make their practice a trade enterprise.

The increasing proportion of old people in our population will increase the usefulness of the physician. In the last fifty years the number of persons over 65 has increased 600%, four times as fast as the total population has grown.

The defect in medical practice today is the lag between scientific knowledge and its practical application.

Respectfully submitted,

J. H. STYGALL, M. D.

SOCIETIES AND INSTITUTIONS—Continued

INDIANA DIVISION OF PUBLIC HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report, February, 1935

Diseases	Feb. 1935	Jan. 1935	Dec. 1934	Feb. 1934	Feb. 1933
Tuberculosis	121	84	211	111	222
Chickenpox	526	529	663	475	593
Measles	2,107	1,744	975	2,191	73
Scarlet fever	1,067	793	949	1,049	554
Smallpox	14	10	0	7	7
Typhoid fever	5	12	19	10	13
Whooping cough	150	174	197	244	136
Diphtheria	152	202	202	130	160
Influenza	413	687	199	303	414
Pneumonia	133	109	75	57	79
Mumps	69	32	12	96	206
Poliomyelitis	2	0	10	1	3
Meningitis	12	5	2	7	7
Encephalitis	1	3	2	0	0

FIRST ANNUAL STATISTICAL REPORT OF THE INDIANAPOLIS MATERNAL HEALTH CLINIC

(Dec. 20, 1933, to Dec. 19, 1934. 52 weekly sessions)

General and Medical Data

1. Number of patients seeking advice..... 562
   a. White 368
   b. Colored 194
   Ratio of white to colored, grossly 2 to 1.
2. Number of patients referred by physicians.. 47 (8.4%)
3. Number of physicians referring patients.... 8
4. Number of patients referred by social agencies 515 (91.6%)
   a. Public Health Nursing Association.... 449 (87.1%)
   b. Family Welfare Society..... 47 (9.1%)
   c. Flanner House 12
   d. Juvenile Court 2
   e. Irving Cheer Center..... 2
   f. Townsbip Trustees 2
   g. Ministers 1
5. Number of patients given advice..... 540
   a. For medical reasons..... 86 (16%)
   b. For social reasons..... 61 (11%)
   c. For economical reasons..... 383 (73%)
6. Number of patients not given advice..... 22
   Reasons—a. Physical 20
   b. Mental..... 2 (1 committed)
7. Number of patients given advice but did not use it 8
   Reasons—a. Disinterested 6
   b. Pregnant on application 1
   c. Husband died 1
8. Number of patients who have returned for check-up 396 (73.3%)
9. Number of patients who have returned for supplies 132 (24.4%)
10. Total amount of money paid to clinic by patients $195.54
    Average payment per patient..... .36
11. Number of patients referred to other clinics for medical care 38 (7%)
12. Number of pregancies known to have occurred 13
    a. White 7
    b. Colored 6
    Method not at fault..... 11
13. Total number of living children reported by 562 patients 2468
14. Average number of living children per patient 4.4
15. Total number of dead children reported by 562 patients 278

PROFESSIONAL PROTECTION

SINCE 1899 SPECIALIZED SERVICE

A DOCTOR SAYS—

"To have a policy with you affords a Doctor a great peace of mind and a feeling of ethical security."

THE MEDICAL PROTECTIVE COMPANY

OF FORT WAYNE, INDIANA

WHEATON, ILLINOIS

Annual Intensive Post-Graduate Course For Doctors of Medicine—Indiana University School of Medicine Announces the Holding of Its Post-Graduate Course from May 20 to June 1, 1935

The first week is intensive, including a series of lectures, clinics and demonstrations, stressing diagnosis and newer methods of treatment. Symposia will be held on clinical disease entities and on symptoms. Clinico-pathological conferences and bed-side demonstrations will be stressed.

Evening programs will consist of addresses by nationally known physicians from other states.

A second Optional week will be available in any of the branches of medicine and surgery and other specialties. This week gives special emphasis to bedside and laboratory study.

For further details write Registrar of the

INDIANA UNIVERSITY SCHOOL OF MEDICINE

INDIANAPOLIS, IND.

5 TYPES

• To enable the physician to fit the treatment to the particular need of the patient, the five types of Petrolagar afford a range of laxative potency which will meet practically every requirement of successful bowel management.

Samples free on request
Petrolagar Laboratories, Inc., Chicago

Petrolagar
ACCEPTED AMERICAN MEDICAL ASSN Council on Pharmacy and Chemistry
FOR CONSTIPATION



PHYSICIANS' BAGS
COWHIDE
$7.98 and up
Gold Lettered

Buy from a Leather Store and Save

GAUSEPOHL TRUNK CO.
51 Monument Circle --- Indianapolis

Important to Your Babies!

ACCEPTED AMERICAN MEDICAL ASSN. Committee on Foods



Larsen "Freshlike" Strained Vegetables are first quality garden fresh vegetables cooked, strained and sealed under vacuum to protect vitamins and mineral salts. For further protection we seal in special enamel lined cans.

All Varieties 10c Per Can

LARSEN'S *"Freshlike"* Strained Vegetables

THE LARSEN COMPANY, Green Bay, Wis.

SOCIETIES AND INSTITUTIONS—Continued

16. Total number of abortions reported by 562 patients 414
    a. Spontaneous and accidental (unintentional) 238
    b. Induced and therapeutic (166 plus 10) (intentional) 176
17. Per cent of intentional abortions of all abortions 42.5%
18. Total child and fetal loss reported by 562 patients 692
    (21.6% of total conceptions—3,160)
19. Per cent of conceptions reported living..... 78.1%

Economical Data

1. Total number of patients whose families lived on private employment income 254 (45%)
2. Average weekly income of these 254 families $12.00
3. Total number of patients whose families lived on public relief employment..... 190 (33.8%)
    a. PWA 151
    b. FERA 39
4. Weekly income of these 190 families.....$5.00 to $15.00
5. Total number of patients whose families had no employment 118 (21%)
6. Total number of patients whose families were helped by charity 127 (22.6%)
    a. Trustees 91
    b. Family Welfare 34
    c. Red Cross 2
7. Total number of these patients whose families were on full charity 89 (15.8%)

PREGNANCY RECORD OF THIRTY-FIVE EXCEPTIONAL CASES

Case No.	Age	Living Children	Dead Children	Induced Abor.	Spon. Abor.	Accid'l Abor.	Therap. Abor.	Total No. Pregnancies
*21	28	2	0	5	0	0	0	7
38	36	12	0	0	1	0	0	13
40	41	9	2	0	1	0	0	12
42	34	7	0	0	5	0	0	12
*51	33	5	0	9	0	0	0	14
59	35	6	5	0	0	0	0	11
72	32	4	1	4	4	0	0	13
93	35	9	0	0	1	0	0	10
96	41	10	1	0	0	0	0	11
*105	41	13	0	0	0	0	0	13
*113	42	5	3	0	8	0	0	16
118	33	2	0	0	5	0	0	7
134	36	9	0	0	2	0	0	11
139	38	9	0	0	2	0	0	11
141	40	11	2	0	0	0	0	13
*142	40	11	2	0	0	0	0	13
155	33	9	0	0	1	0	0	10
156	36	9	1	0	0	0	0	10
161	37	10	0	0	0	0	0	10
180	39	9	3	0	0	1	0	13
*185	40	14	1	0	0	0	0	15
196	36	9	0	0	1	0	0	10
241	38	9	3	0	0	1	0	13
**270	31	5	2	7	0	0	0	14
331	43	9	3	0	1	0	0	13
337	44	9	0	0	0	0	0	9
360	34	9	1	0	2	0	0	12
394	42	10	2	0	6	0	0	18
*416	36	8	1	3	2	0	0	14
431	39	7	5	0	1	0	0	13
432	37	9	2	0	0	0	0	11
460	31	7	1	5	0	0	0	13
*478	36	10	3	0	4	0	0	17
*494	33	9	1	2	1	1	0	14
*548	43	13	2	5	0	0	0	20
Total		298	47	40	48	3	0	436

Average age of these thirty-five patients.....37 years
Per cent of conceptions living—68.3%. Per cent lost—31.7% (see Nos. 18 and 19)
Average number of living children per patient..... 8.5
Conceptions intentionally interrupted.....40 (9.1%)
Conceptions unintentionally interrupted.....51 (11.7%)
Per cent of intentional abortions of all abortions.....44%
Average number of conceptions per patient.....12.5
Source of family support—
a. Private employment.....13 (37.1%)
b. Public Relief employment.....12 (34.4%)
c. Township trustees.....10 (28.5%)
Families dependent on public help.....22 (62.8%)

SOCIETIES AND INSTITUTIONS—Continued

RESOLUTIONS PASSED BY THE INDIANA ROENTGEN SOCIETY AT THEIR ANNUAL MEETING IN INDIANAPOLIS, INDIANA, FEBRUARY 22, 1935

Due to the recent request for and discussion of a general tuberculosis survey of school children, the Indiana Roentgen Society in its annual meeting, after free discussion of the problems involved, adopted the following resolution:

1. That such a survey will necessitate the examination of thousands of children with mass production methods rather than the more scientific examination made by competent physicians and qualified roentgenologists.

2. A negative x-ray examination may be followed in three months by a positive one. These surveys therefore have a questionable value unless repeated at frequent intervals in that they create a sense of false security in the mind of the parent or guardian and occasionally a loss of valuable time while the disease remains unrecognized and unsuspected.

3. We believe a more valuable procedure to be the presentation by each school child of a health certificate from the family physician at the beginning of the school year. We recommend that after a positive Mantoux test a proper clinical examination and history taking, arrangements should be made in local districts to have the children examined according to the facilities available, the fees charged to be based upon the social status of the child and borne by the parents.

4. That the Indiana Roentgen Society disapproves of such short cuts taken in surveys, or the use of paper which is 60 per cent less efficient as compared with transparent films, and the single film examination.

5. That in conclusion: We feel that general surveys are in their nature mass production and therefore inefficient and create a sense of false security, and tends toward socialized medicine.

By The Committee on Resolutions

James N. Collins, *Secretary.*
Indiana Roentgen Society.

COMMERCIAL ANNOUNCEMENTS

FOR SALE: "ELMHURST"—adjoining Connersville, Indiana. Institutional building; one-time private school; one-time sanitarium; fifty rooms, also two residences, all modern; sixty acres; beautifully situated on wooded hillside plateau with eastern exposure. Address Edwin Rickert, Connersville, Indiana.

DRUG OR RETAIL SALESMAN calling regularly on dispensing physicians, free to accept non-competing line. Liberal commission and full protection. Give present line, territory covered, and number of trips per year. Complete cooperation and direct mail assistance. Gaston Moreau, 509 Fifth Avenue, New York, N. Y.

ASSISTANCE TO MEDICAL WRITERS. Research, Abstracts, Translations (all European languages). Papers prepared. All work done personally. Ten years' medical literary experience with institutions and leading journals. Florence Annan Carpenter, 413 St. James Place, Chicago, Illinois.

ADVERTISERS IN THIS ISSUE

Akron Surgical House, Inc., Indianapolis ... xii
Appalachian Hall, Asheville, N. C. ... xiv
Approved Clinical Pathologists ... xxxi
Baxter One-Stop, Indianapolis ... xiv
Blake, Dr. J. M., Chicago ... xiv
Chesterfield Cigarettes ... xxxiii
Coca-Cola ... xv
Cocomalt—R. B. Davis Co. ... xv
Cook County Graduate School of Medicine, Chicago ... v
Commercial Announcements ... xxi
Corn Products Refining Co., New York ... xvi
Craig's Candies, Indianapolis ... xvii
Curdolac Food Company, Waukesha, Wisc. ... xiv
Eli Lilly and Company, Indianapolis ... xviii
Gausepohl, E. J., Co., Indianapolis ... xx
Grain Dealers Natl. Mutual Fire Ins. Co., Indianapolis ... v
Hanger, J. E., Inc., Indianapolis ... xxxi
Home Lawn Sanitarium, Martinsville ... iii
Hord's Sanitarium, Anchorage, Kentucky ... xiii
Hynson, Westcott and Dunning, Inc., Baltimore ... xii
Indiana University School of Medicine, Indianapolis ... xix and xxxiv
Kenilworth Sanitarium ... xxxii
Larsen co., Green Bay, Wisc ... xx
Louisville Neuropathic Sanat., Louisville, Ky. ... xxxii
Mead Johnson and Company, Evansville ... iv
Medical Protective Company, Wheaton, Illinois ... xix
Milwaukee Sanitarium, Wauwatosa, Wisconsin ... xxxiv
Morris Plan, Indianapolis ... vii
Neuronhurst—Fletcher's Sanatarium, Indianapolis ... xvii
Norways—Sterne Memorial Hospital, Indianapolis ... xxxi
Oconomowoc Health Resort, Oconomowoc, Wisconsin ... ix
Oxford Retreat, Oxford, Ohio ... xxxii
Parke, Davis and Company, Detroit ... ii
Petrolagar Laboratories, Chicago ... xx
Philip Morris and Co., New York ... xii
Physicians' Directory ... xxii
Pitman-Moore Company, Indianapolis ... ix
Plymouth Sanitarium, Plymouth, Ind. ... xiv
Ritter, F. A., Co., Detroit, Mich. ... xxxi
Simpson Institute of Radium Therapy, Chicago ... xiii
Squibb, E. R. and Sons, New York ... xi
Stokes Hospital, Louisville, Kentucky ... v
Waukesha Springs Sanitarium, Waukesha, Wisc. ... xxxii
White-Haines Optical Company, Indianapolis ... xv
Wilson's Milk, Indianapolis ... xvii

PHYSICIANS' DIRECTORY

SURGERY AND GYNECOLOGY

EDMUND D. CLARK, M.D.
Practice Limited to
Abdominal and General Surgery
712 Hume Mansur Bldg. Indianapolis, Indiana

Hours: 11 to 1, or by appointment Phone: Hemlock 2226
WILLIAM N. WISHARD, M.D.
HOMER G. HAMER, M.D.
HENRY O. MERTZ, M.D.
WILLIAM N. WISHARD Jr., M.D.
Genito-Urinary Diseases
1711 N. Capitol Avenue Indianapolis, Indiana

Hours: 12 to 2, and by appointment
P. E. McCOWN, M.D.
Diseases and Surgery of the Genito-Urinary Organs
521 Hume Mansur Bldg. Indianapolis, Indiana

Office Hours: 11 to 12, 3 to 5 and by appointment
PHONE Ri. 7926
R. O. McALEXANDER, M.D.
Surgery and Diseases of Women
740 Bankers Trust Bldg. Indianapolis, Indiana

HOURS: 12 to 4, and by appointment PHONE: Office Lincoln 3125
FRANK C. WALKER, M.D.
Gynecology and Abdominal Surgery
Hume Mansur Bldg. Indianapolis, Indiana

JOHN H. EBERWEIN, M.D.
Practice Limited to
Abdominal and General Surgery
720 Hume Mansur Bldg. Indianapolis, Indiana

JEWETT V. REED, M.D.
General and Abdominal Surgery
820 Chamber of Commerce Bldg.
Indianapolis, Indiana

PHONES: Office, Riley 1714; Drs. Exch., Cherry 2031; Res., Wash. 2321
C. O. McCORMICK, M.D.
Practice Limited to
Obstetrics and Gynecology
504 Medical Arts Bldg. Indianapolis, Indiana

NORMAN E. JOBES, M.D.
Surgeon
Traction Terminal Bldg. Indianapolis, Indiana

Hours: 2 to 3 daily except Wednesday and Sunday
GOETHE LINK, M.D.
Practice Limited to Surgery
608 Indiana Pythian Bldg. Indianapolis, Indiana

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

OFFICE OF PUBLICATION: 1021 Hume Mansur Bldg., INDIANAPOLIS, INDIANA

VOLUME 28 MAY, 1935 No. 5

ORIGINAL ARTICLES

THE VALUE OF RADIOSCOPY IN HEART DISEASE*

C. A. BISHOP, M. D.
SOUTH BEND

Cardiac radiology, during the past few years, has proved its increasing value as a diagnostic aid in heart disease. The roentgen ray at times may give findings of positive value which the usual routine method of examination has failed to reveal. Even aneurysmal dilatation of the aorta may be missed in the routine examination of the heart and recognized for the first time at a fluoroscopic or roentgen ray examination undertaken for some other purpose. As comparatively few physicians make use of the fluoroscope or roentgen ray to supplement the physical examination, its value, in either a confirmatory or negative way, is not generally appreciated.

The roentgen ray is more accurate than palpation or percussion, and is not handicapped by sex, obesity, or thoracic deformities. An increase in the degree of convexity or bowing of the ribs as they join the sternum modifies the percussion note and makes it especially difficult to map out the heart borders, particularly the right border of the heart. One has only to percuss the heart's borders on an emphysematous chest or a thorax deformed by scoliosis and then check by orthodiagram or a seven foot roentgen ray film. It is not an exaggeration to state that percussion at times is greatly inaccurate by comparison.

Because percussion of the heart's borders is unreliable, some insurance companies are satisfied with palpation of the apex beat as an index of cardiac enlargement. Percussion gives us some idea of the size of the heart in the frontal plane by estimating the transverse diameter, but the heart is a three dimensional organ, and the roentgen ray, by turning into the right and left oblique positions, gives us a measure of the different chambers of the heart in the sagittal plane as well as the frontal.

The heart is normally surrounded by air containing lung tissue which is permeable to the roentgen ray, and the aorta and pulmonary artery, as well as the opaque heart tissue, stand out well by comparison. There are three methods of radiographic investigation of the heart: orthodiagraphy, teleradiography, and fluoroscopy.

Orthodiagraphy is the oldest method and is in common use especially in the European clinics. It has the advantage of being inexpensive. The orthodiagraph makes use of a movable tube and only the central parallel rays from the tube are



Fig. 1. (by Parkinson) Diagram of the normal heart in the anteroposterior, right oblique and left oblique positions. In the anteroposterior position is best seen the right ventricle and right auricle, also the right border of the ascending aorta and the left border of the upper part of the descending aorta. In the right oblique position the right ventricle, right and left auricle are best seen. The width of the ascending aorta is best measured in this position. In the left oblique position the left ventricle is well seen, also the whole arch of the aorta, and if the aorta is sclerotic its descending portion may be seen.

* Presented before the Medical Section of the Indiana State Medical Association at the Indianapolis session, October, 1934.



Fig. 2. Normal heart in the anterior position lying obliquely within the chest.

used. In ordinary fluoroscopic examination the tube is fixed near the chest, and the heart shadow is greatly enlarged by the divergent rays. By moving the tube around the borders of the heart and great vessels, and plotting thin outlines on the screen, an accurate measurement is obtained.

Teleroentgenography, or teleradiography, is used to obtain a graphic record of the heart on the roentgen ray film, with the tube a distance of two meters or seven feet from the chest so that the divergent rays are more nearly parallel and thus cause less inaccuracy, although the error is still appreciable even at this distance.

Simple screening or fluoroscopic examination is most commonly used and perhaps the most valuable method of roentgen ray examination of the heart. By this method one can, with practice, quickly tell whether or not the heart is enlarged. In screening the heart three positions, the anteroposterior, the right oblique, and the left oblique are commonly used. In the anteroposterior position (Figure 1) the patient is erect, facing the observer with his chest against the screen. Then is seen the right border of the heart formed by the superior vena cava, the ascending aorta and the right auricle. The left border is longer than the right. The upper part is made up of the distal half of the arch of the aorta, the beginning of the descending aorta and the pulmonary artery, while the lower part is made up of the left auricular appendix and the left ventricle. In the right oblique position the patient is turned to the left about 45 degrees so that the right anterior side of the chest wall touches the screen. In this position is seen anteriorly the convex curve of the right ventricle, the pulmonary artery and the ascending aorta. The aorta sweeps to the spine posteriorly and under the aorta the posterior border of the heart is composed of the bifurcation of the pulmonary artery and the left and right auricles, the right auricle extending to the diaphragm. In the left anterior oblique position the patient is rotated from the anteroposterior position to the right through an angle of about 45 degrees until the left anterior part of the chest wall touches the screen. Then the two ventricles and auricles are seen, the right ventricle in front and the left ventricle behind. The right and left auricles are seen above. Above this is seen the aortic arch, and if the aorta is sclerotic the arch and descending aorta may be well outlined.

Observation of the movements and pulsations of the chambers of the heart under the fluoroscope is not a very valuable part of x-ray diagnosis of cardiac conditions. The rate of pulsation is so rapid and the time between auricular and ventricular contraction is so small that it is not easy to distinguish between them. In auricular ventricular heart block one can, however, distinguish the contractions of the auricles and ventricles in the left oblique position. The contraction of the ventricles varies in appearance, depending upon whether it is seen in rest or after exercise or nervous excitement. The aorta is seen to dilate in systole and results in kind of rocking movement with retraction of the heart below and out-thrust above. The movement is exaggerated with excitement or exercise. Under certain conditions it is pathologically exaggerated as an aortic or pulmonary regurgitation.



Fig. 3. Centrally placed, drop heart with low diaphragm; sometimes called "D.A.H."

The normal heart varies in configuration, depending on age and habitus. Before puberty the heart is usually of the drop asthenic type, no matter what the build of the individual. After adolescence the heart gradually conforms to the mature adult build and assumes one of three normal shapes, depending upon whether the individual is thin, obese, or average build. In persons of average build the heart is obliquely placed (Figure 2) within the chest. In thin persons the heart is long and narrow (Figure 3), and in the obese the heart is more transverse (Figure 4). The transverse diameter of the heart in the average individual is one-half the diameter of the chest width. This ratio 1:2 is called the heart-lung coefficient and is a rough method of determining quickly whether or not a heart is enlarged. In the obese person with high diaphragm the heart is more transverse



Fig. 4. High transverse heart.

and the heart-lung coefficient may be as low as 1:1.9. In the person of asthenic build and narrow chest the heart-lung coefficient may be as high as 1:4. The position of the diaphragm has much to do with the shape of the heart. A heart may appear small because it is lowly placed. This same heart in the pregnant woman may appear enlarged because of the elevation of the diaphragm.

A determination of the cause of enlargement of the heart cannot be made by roentgen ray unless there is change in the shape of the heart through enlargement of one or more of its chambers. The heart does not usually enlarge as a whole but certain chambers enlarge as a result of certain heart lesions. Congenital heart lesions and disease of the heart valves produce rather characteristic alteration in the shape of the heart. Nearly all congenital



Fig. 5. The boot shaped heart of aortic regurgitation.

lesions produce a dilatation of the pulmonary artery due to the mixing of venous and arterial blood streams. This is shown by screening or roentgen ray by bulging in the region of the pulmonary artery, not unlike the mitral configuration seen in mitral valve lesions. When, therefore, is seen a dilatation in the region of the pulmonary artery certain congenital malformations such as patent ductus arteriosus, pulmonary stenosis, persistent truncus arteriosus should be considered. Coarctation of the aorta may be revealed fluoroscopically when there is marked decrease or absence of the aortic arch shadow. Additional evidence is given when there is erosion of the ribs due to enlarged costal arteries forming a collateral circulation.



Fig. 6. The concentrically enlarged left ventricle of chronic essential hypertension, giving a snub nosed appearance.

Acquired valvular disease of the heart causes certain characteristic heart shapes. In aortic regurgitation the heart assumes the well known boot shape (Figure 5) because the left ventricle enlarges downward and outward. In left ventricular hypertrophy due to chronic hypertension the left ventricle assumes a snub nosed form (Figure 6).

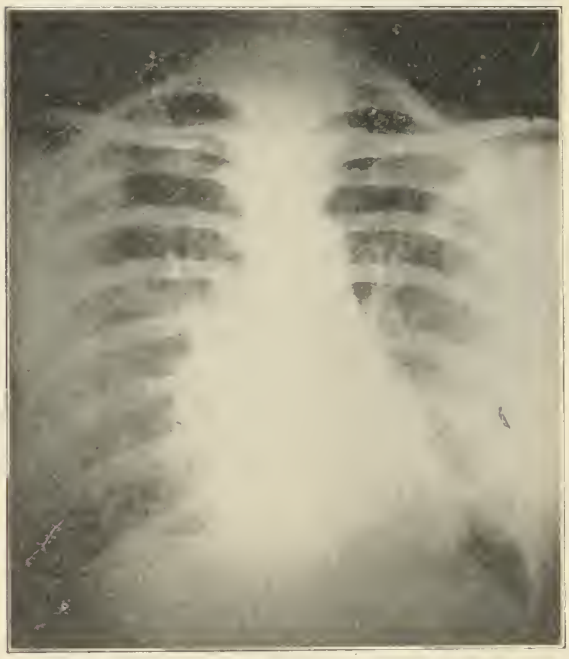


Fig. 7. Heart seen in mitral stenosis. Prominence of left border of heart in region of left auricular appendix and pulmonary artery. Passive hyperemia of lungs in region of hilus.

Perhaps the best example of the diagnostic help rendered by the roentgen ray is seen in mitral stenosis (Figure 7). In this case the left border shows an enlarged pulmonary artery and enlarged auricular appendix in the anteroposterior position. In some cases this extra bulge is not visible and the patient has to be turned into the right oblique position (Figure 8) to see the large left auricle extending into the retrocardiac space. It has been said that after the characteristic diastolic murmur, enlargement of the left auricle is the surest sign of mitral stenosis.

Pericarditis with effusion presents rather a characteristic roentgen ray picture. The heart assumes a bottle or flask shaped appearance (Figure 9) due to the fluid bulging out the pericardium and obliterating the normal landmarks of the different heart chambers.

Passive congestion of the lungs caused by mitral stenosis or heart failure produces an increase in density of the broncho-vascular tree and a loss of translucency of the lungs from this and exudation into the alveoli. These shadows cause a thickening of the broncho-vascular markings and dilated capillaries, seen end on, produce a miliary appearance of the lung. These spots tend to get smaller farther out from the hilus of the lung, which is a distinguishing point from miliary tuberculosis.

Three conditions are mainly associated with dilatation of the aorta: syphilis, hypertension, and aortic sclerosis.

Luetic dilatation of the aorta or dilatation due to hypertension tends to give the aorta a blunt smooth curve and if the arch and descending aorta are involved increase in width of the upper part of the left border shadow is found. Aneurysmal shadows may be readily seen by fluoroscopic examination. There may or may not be vigorous systolic pulsation of the aneurysmal sac. The presence of pulsation may be used as a point of differentation between aneurysms and mediastinal tumors, although by no means diagnostic, as tumors may pulsate through direct transmission of the wave from the aorta. Aneurysms of the ascending aorta and arch are well seen in the left oblique position. Tortuosity of the aorta due to sclerotic changes without dilatation may cause the aorta to bulge out and up to the left, producing a prominent aortic knob. An atheromatous aorta produces a shadow which is as dense or denser than the left ventricle, and the course of the sclerotic aorta may be well seen throughout in the left oblique position.

Spinal deformities—scoliosis and kyphoscoliosis—cause changes in the heart's shape and position. In right scoliosis the heart is rotated to the left and causes a mitral configuration somewhat similar to mitral stenosis. In left scoliosis the heart tends



Fig. 8. The heart of mitral stenosis seen in the right oblique position. The hypertrophied left auricle extends to the posterior cardiac sulcus, pushing the esophagus, outlined by barium, backward.



Fig. 9. The flask or bottle shaped heart of pericardial effusion with the transverse diameter of the heart greatly increased. The pericardial fluid bulges out the pericardial sac and obliterates the normal land marks of the heart.

to rotate to the right and front and is centrally placed and appears small. Rotating the patient slightly to the left and right oblique positions respectively gives the accurate size of the heart. In marked cases of kyphosis the aorta tends to cross transversely across the thorax to follow the course of the spine and form a large retro-cardiac space.

It is in such cases as these that the roentgen ray serves an important place in the diagnosis of cardiovascular disease. As a useful supplement to clinical examination it is comparable to electrocardiography; diagnosis is confirmed and frequently added to or changed by it. Permanent records of the heart's shadow may be obtained by orthodiagram or seven foot roentgen ray film. Such records are of great value in determining the progression of disease, and the observation of the heart's shadow over a given period may be helpful in prognosis.

122 N. Lafayette St.

MAY IS INDIANA'S POST-GRADUATE MONTH. DO NOT LET IT PASS WITHOUT TAKING ADVANTAGE OF THE OPPORTUNITIES OFFERED YOU.

SOME RECENT ADVANCES IN ANESTHESIA*

P. K. KNOEFEL, M. D.†
NASHVILLE, TENNESSEE

If Dr. Magnuson were addressing us on the evening of December the sixth, of the year 1834, and giving the prime requisites of a good surgeon, we should doubtless hear as two of them the ability to close his ears to the cries of his patient, and to finish his procedure with all possible dispatch. However, these requirements are no longer made of a surgeon, since the year 1846, when William T. G. Morton made in the Massachusetts General Hospital the first public demonstration of successful surgical anesthesia. Ever since then, surgeons have been capitalizing on the opportunities offered them for unhampered performance, and are at once ready to complain of the inadequacies of anesthesia and to admit that only with its advance is it possible that their own technic may expand.

It is apparent that much of the future development in the field of anesthesia will come from the laboratory, not only in the finding of new anesthetic agents, but in finding better ways to give the old ones. Probably the greatest single advance in the technic of inhalation anesthesia for the last ten years is the use of the closed system with complete rebreathing, often called the carbon dioxide absorption method. In 1915 the pharmacologist Jackson[1] described the maintenance of anesthesia in dogs for prolonged periods, with only the amount of nitrous oxide that was required originally to produce anesthesia, this gas being pumped past the animal's muzzle, with the addition only of the oxygen required for metabolism, removing the excreted carbon dioxide with caustic soda. This was a convincing demonstration of the central fact of anesthesia, that it rests on the production and maintenance of a certain concentration of the agent in the blood and tissues, there being no chemical combination, no use of the substance by the body. This demonstration was seized upon by Waters[2], in 1924, as an answer to the problem of the wasteful method of simply pushing anesthetic vapor at the patient, to supply him anesthetic and oxygen, and to wash away his excreted carbon dioxide. He proceeded to devise a simple but efficient mechanism, known now as the to-and-fro apparatus, which consists of a face mask, and a rubber breathing bag, between which is a metal canister containing soda lime. Into the apparatus is run an anesthetic vapor, and oxygen in an amount neces-

* Presented before the Fifth District Medical Society, the Vigo County Medical Society and the Terre Haute Academy of Medicine, December 6, 1934.

† From the Department of Pharmacology, Vanderbilt University Medical School.

[1] Jackson, D. E.: *J. Lab. and Clin. Med.* 1:1, 1915.

[2] Waters, R. M.: *Anesth. and Analg.* 3:20, 1924; *ibid.* 11:97, 1932; *Calif. and West. Med.*, 35:342, 1931.

sary to dilute the anesthetic to the desired concentration, and at a rate necessary for the needs of metabolism; the expired carbon dioxide is absorbed by the soda lime. After enough anesthetic has been supplied to produce the proper concentration in the body, no more need be added. Beyond this last feature, which results in a great saving on the cost of anesthesia, there are other advantages; loss of water and heat from the body through the lungs is largely prevented, and the anesthetic vapor is supplied to the patient warmed and moist. Breathing is usually more quiet than with open methods, or with partial rebreathing. As the anesthetic is confined within the bag, there is less danger of explosion through escape of the agent, and since the interior of the system is moist, there is little chance of formation of static electricity.

As the use of any inhalation anesthetic supposes the entrance into the lungs of an anesthetic mixture, and as indeed the free passage of respiratory gases is necessary for life, the use of some sort of intrapharyngeal or intratracheal airway is advisable. A further refinement of technic, credited to Guedel and Waters[3], has at once guaranteed this and supplied other advantages such as removing the bulky mask from the face. Some of you may be familiar with the method of Meltzer and Elsberg, which attempted to insure respiratory interchange by using a double tracheal tube, which led ether vapor under pressure into the trachea and out. This plan was not successful because the cold ether vapor damaged the mucosae and tended overmuch to wash carbon dioxide out of the lungs. However, if the closed system as described is used, intratracheal cannulation is quite feasible, and an excellent instrument for it is that of Guedel and Waters, which is a soft rubber catheter around which is slipped a rubber balloon. This is introduced, in the anesthetized patient, through the glottis, and when the balloon is inflated through its catheter, an air-tight entrance to the trachea is provided, which may then be connected to the canister of soda lime. This technic has other advantages than supplying an airway and sealing the respiratory tract from foreign material. In removing the mask from the face, it allows freer surgical manipulation. It makes artificial respiration easy simply by pressure on the breathing bag. Furthermore, with the use of a catheter supplied with two balloons, it allows respiration to be carried on with only one lung, the other being sealed at its bronchus with the second balloon, thus collapses and permits surgical procedure upon it.

It is these newer methods of administration of anesthetics which have been developed that have made practicable the use of some of the newer agents. It is important to realize, first, that the stimulus to the search for new anesthetics has been not the inadequacy or weakness of the early ones, for ether and chloroform are quite active enough; it has been the many undesirable traits of these agents, such as their irritant properties, their often narrow therapeutic range, or margin of safety, their interference with cellular metabolism, and with the function of liver and kidney. So the trend in useful agents has swept away from the powerful but noxious compounds to weaker anesthetics, which are, however, less damaging. One of the most valuable of these is ethylene, and when in the hands of a trained anesthetist, especially if given by the closed method, ethylene is for many purposes a satisfactory anesthetic. Unfortunately, it is not a very powerful agent, and when one attempts to give it in high concentration to complete muscular relaxation, one reduces the oxygen content of the mixture to such an extent that anoxemia results. As ethylene is nearly devoid of undesirable side actions, it has remained useful for producing light anesthesia, or for induction in sequence anesthesia.

Searching among the homologs of ethylene for a good drug, various persons had tried propylene, or methyl ethylene, to find it a more active anesthetic than ethylene, but also an agent prone to produce cardiac irregularity, and one which seemed to develop unpleasant properties upon being tanked. Lucas, in Professor Henderson's laboratory in Toronto, while pondering the possible presence of impurities in tanked propylene, conceived that there might be present some cyclopropane, an isomer of propylene, whose pharmacological action was unknown. As Figure 1 shows, it is a cyclic hydrocarbon, a gas at ordinary conditions having the same number of carbon and hydrogen atoms as propylene, and indeed resembling an unsaturated hydrocarbon in its properties. When Lucas tried cyclopropane on animals, he found it to act not as an undesirable contaminant would, but as an anesthetic of value far surpassing that of propylene. On further experimentation it proved to be active at very low concentration and to be remarkably free from undesirable metabolic effects.[4]

It has since received thorough clinical trial especially at the hands of Waters and collaborators at Wisconsin[5]; the number of cases in which it has been used exceeds one thousand. The compound can readily be compressed in cylinders to a liquid; the gas is explosive when mixed with air or oxygen, but not more so than ether. Like ether, its vapors are heavier than air. It is devoid of irritant properties and is respirable in high concentration. Anesthesia is rapidly produced and can be pushed rapidly to complete muscular relaxation with concentrations of 10 to 20 per cent. The breathing is quiet during cyclopropane anesthesia and if the agent is pushed, respiration will stop at a con-

[3] Guedel, A. E. and Waters, R. M.: *Ann. Otol. Rhinol. Laryngol.* 40: 1139, 1931.

[4] Lucas, G. H. W. and Henderson, V. E.: *Anesth. and Analg.*, 9: 1, 1930; *Arch. Internat. Pharmacod. Therap.*, 37: 155, 1930.

[5] Waters, R. M. and Schmidt, E. R.: *J. A. M. A.* 103: 975, 1934.

centration of the agent much lower than that required to produce cardiac irregularities. On withdrawal of the agent, recovery is rapid, and postoperative complications such as vomiting, pulmonary pathology, or the presence of abnormal constituents in the urine, are definitely less frequent than with ether. Cyclopropane is highly potent, and potentially dangerous, requiring a skilled anesthetist for its administration; it is expensive and necessitates the use of the closed system—but it is a very promising drug.

Another new agent is divinyl ether, or divinyl oxide. It was Professor Leake's conception[6] that a substance resembling chemically both ethylene and ether might be more powerful and still less damaging than ether. As seen in Figure 1, divinyl ether is similar to diethyl ether except that there is present the unsaturation with hydrogen that is characteristic of ethylene. This compound is more active than ethyl ether—more rapid in its action and more potent, though having even a wider margin of safety between anesthetic and fatal blood concentration than ether. Recovery from its effects is rapid, it is less irritating than ether, and seems to disturb metabolism less. It may possibly have more effect on the liver than ether, but is not so dangerous in this regard as chloroform. It continues to be of promise for use when a potent agent is desired.

Now there are some considerations which lead us away from inhalation anesthesia. Of all the agents administered in this way, none is perfect. The list of substances which can be administered in this manner is definitely limited; there is, furthermore, no immediate suggestion of great possibilities still unexplored, so there remains for us in the search for new agents the tremendous list of substances which, because of their physical properties, cannot be given by inhalation and thus must enter the body from the alimentary tract, the subcutaneous tissues, or through the wall of a vein. Let us first consider the advantages of such a procedure, as we have seen it. To the patient it means often that the anesthetic can be given without his being aware of it; he may even drop off gently to sleep in the comfort of his own bed. To the surgeon it means relief from the inconveniences of the clutter of apparatus. But what are the drawbacks? Can the surgeon undertake lightly the irrevocable act of injecting a fixed dose, which he has tried to calculate from data which have an uncertain bearing, and which dose passes almost completely beyond his power to influence it, once administered? The fate of the drugs we use in this way is incompletely understood; we know that some may be conjugated with glycuronic acid as happens with avertin, or may be destroyed as happens with certain barbiturates. The quantitative aspect of these mechanisms is not handily known, and to predict the action of the drug in the individual case is not uniformly possible.

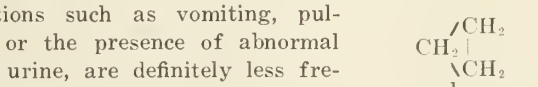


Figure 1

The use of drugs by injection to produce anesthesia is not new, as we are likely to think; nearly every narcotic that has been developed has been tried in this manner, all the way from that earliest agent, ethyl alcohol. The trend has been constantly toward more active agents, and those that are more rapidly removed by the body from activity, for it was found with the weaker and resistant compounds that such a large dose had to be given for the desired effect, that it produced a prolonged narcosis, one which allowed to develop very unpleasant sequelae. However, it is no small achievement that so much progress has been made in the development of new agents up to the present, but has the goal of a practicable anesthetic for parenteral administration been reached? We are arrested simply by contemplation of the long list of proposed drugs, alcohol, chloral hydrate, hedonal, isopral, somnifen, pernocton, amytal, dial, pentobarbital, now evipan, all being recommended in glowing terms—for a while. Is evipan merely the most recent of this list, or is it at last the successful one? One can say only that at least it points the direction for the future, it may be *the* agent, but it is best regarded with caution.

In general, the attitude toward this group of substances is the conservative one of using them in moderate doses, not sufficient to produce anesthesia unaided, giving them by mouth or by rectum, according to the drug and the type of patient. This mild narcosis is then supplemented by an inhalation anesthetic, of which much less is needed than if it were given alone. This combination anesthesia is indeed much better than if it were produced by either agent alone, not only for the obvious reasons such as the mildness of induction, allaying of apprehension, etc., but because the basal anesthetic actually prevents certain reflex disturbances which the inhalation anesthetics are likely to cause through their action on the visceral nervous system. If chloroform is being used, the chance of its producing cardiac syncope is greatly reduced by the preliminary medication. The delirium of induction of ether anesthesia is reduced. It appears also that a large part of the metabolic disturbance of ether anesthesia is due to stimulation of the sympathetic nervous system and the outpouring of adrenin from the adrenals, and this is prevented by the giving of a barbiturate.

As for the individual agents themselves, the choice is a difficult one. I am not convinced that

[6] Leake, C. D. et al.: *J. Pharm. Exper. Therap.* 47: 5, 1934.

avertin per rectum has much real advantage over paraldehyde given in the same way[7]. It is more active than paraldehyde, but does this matter if a supplementary agent is required anyway? It is certainly more dangerous, is troublesome to prepare, and is much more expensive. The presence of paraldehyde on the breath is a debatable disadvantage. The use of avertin, which must be conjugated in the liver, and of barbiturates which must be destroyed by the liver, increases the burden on that organ in a manner not to be disregarded. Of the barbiturates, pentobarbital (or nembutal), amytal, and evipan (evipal) possess the features of potency and rapidity of destruction that are needed. They are all expensive.

ANESTHETIC AND TOXIC ACTIVITY OF LOCAL ANESTHETICS* COMPARED WITH PROCAINE=1

	Anesthesia		Toxicity	
	Surface	Infiltration	Subcutaneous	Intravenous
Procaine	1	1	1	1
Stovaine	2	4	1.6	1.5
Tutocaine ...	14	40	2	2
Tropacocaine.	3.5	4	2	2
Cocaine	3.6	20	16	2.6
Psicaine	4.5	20	7	2.6
Eucaine	0.6	8	1.3	3.3
Alypin	0.4	4	6	4
Holocaine ...	5.5	20	8	4
Nupercaine..	25	2,000	50	10

Figure 2

LOCAL ANESTHETICS

A field even surpassing the barbiturates for commercial exploitation is that of the local anesthetics. No drug house is without its product, some even having several favorites, all of which are urged upon the profession, and certainly the end is not yet. Fortunately there is for most of these a large amount of data from animal experimentation, and a collection of some of this is shown in Figure 2. It shows the trends in time very well; after cocaine, the move was toward less toxic agents; procaine was the turning point, and since then, agents of increasing activity have been proposed. Whether or not this is justified can in part be seen from the figure. A number of agents can be found to be more active as anesthetics than procaine or even cocaine, but too often there is an accompanying increase in toxicity, so that the relation of these two factors is less favorable. Although cocaine might readily be replaced, it is more difficult to supplant procaine.

That local anesthetics are very toxic substances is a commonplace to the laboratory investigator, who often concerns himself with the determination of that activity, but the practical user of local anesthetics in the clinic may have the good fortune not to see manifestations of toxicity, and there is not adequate general recognition of the fact. There *are* enough cases of human poisoning with local anesthetics to make doing something about it worth while, particularly when the means is so simple and has other recommending features. It is Tatum's contribution to our subject[8] that we know now depression of certain parts of the central nervous system renders the organism much less susceptible to the toxic action of local anesthetics, undoubtedly because they operate through these regions. Just as an animal that has been deprived surgically of its cerebral hemispheres is very difficult to poison with cocaine, so is an animal whose nervous system has been depressed by a barbiturate. That there is a certain specificity required in the type of depression is shown by Figure 3[9]. The figures show the lethal dose of certain local anesthetics when administered subcutaneously to rabbits, and also after the rabbits had received amounts of depressant agents in amounts causing loss of posture and more or less narcosis. Morphine and colonic ether anesthesia in dogs had failed to influence significantly the toxicity of cocaine, and in rabbits, narcotic doses of magnesium sulphate even rendered them more sensitive to cocaine. Protection is afforded against not only cocaine but procaine and butyn, and also to a drug of quite different structure, nupercaine[10]. It has been shown by Tatum and others[11] that barbital affords increasing protection to cocaine through the scale of rat, rabbit, dog and monkey, and presumably this extends to man. When a simple protective measure is available, its use is surely worth while, particularly when there are the other advantages of sedation and relaxation. Then, too, the antidotal effect is much greater with preliminary medication than if one waits until phenomena of intoxication appear.

We do not have a universal panacea. Just as there are different forms of intoxication from local anesthetics, there are forms we cannot prevent. Chief of these is the one of sudden syncope, pallor, more or less simultaneous disappearance of pulse and respiration and death with perhaps no convulsive phenomena. We believe this to be the result of rapid entrance of a large amount of drug into the blood stream, either by inadvertent intravenous injection, or through good absorption from mucous membranes. We believe it is fundamentally primary cardiac failure, from the direct action of the anesthetic. As might be expected, it cannot be prevented

[7] Stewart, J. D.: *Brit. Med. J.* 2: 1139, 1932.

* Data from Meyer and Gottlieb, Die Experimentelle Pharmakologie, 8th Edition, 1933, p. 168. Used with permission of the American publishers, J. B. Lippincott Co., Philadelphia.

[8] Tatum, A. L. et al.: *J. A. M. A.* 84: 1177, 1925.

[9] Knoefel, P. K. et al.: *J. Pharm. Exper. Therap.* 44: 397, 1930.

[10] Wahl, C. C. and Knoefel, P. K.: *Proc. Soc. Exper. Biol. Med.* 29: 368, 1932.

[11] Tatum, A. L. and Collins, K. H.: *Arch. Int. Med.* 38: 405, 1926.

by the cerebral depressants which so effectively abolish the central action of the drugs, and to my knowledge there is no way of preventing it other than adherence to care in technic, such as the frequent aspiration with the injection syringe to insure avoidance of blood vessels.

LETHAL DOSES OF LOCAL ANESTHETICS WITH AND WITHOUT PROPHYLAXIS

subcutaneously in rabbits
figures = mg./kg.

	Cocaine	Procaine	Butyn	Nupercaine
No Prophylaxis.	100	800	90	10
Urethane.....	100			
Chloral Hydrate	100			
Paraldehyde....	200			30
Barbital.....	250	1,400		
Phenobarbital..	250			
Amytal.....	400	1,700	225	

Figure 3

Unfortunately, it is to this type that many of the cases of procaine poisoning belong. Here the problem is much complicated by the epinephrine which is usually present in the procaine solution. While untoward reactions to epinephrine are known, and usually attributed to hypersensitivity, it is doubtful whether this can be the full explanation. On the basis of considerable experimental evidence of various sorts, I believe this type of reaction to result from the rapid entrance into the blood stream of procaine and epinephrine and a mutual enhancement of their toxicity. This can be shown directly in animals, that a mixture of procaine and epinephrine when injected intravenously is more toxic than either constituent alone. The previous administration of many local anesthetics increases the rise in blood pressure resulting from the injection of epinephrine. Both epinephrine and local anesthetics derange the function of the specialized cardiac tissue in which the cardiac impulse arises and is conducted. Furthermore, local anesthetics paralyze the nervous regulatory mechanisms which tend to restore the action of the heart to normal when it is disturbed. And lastly, local anesthetics delay the destruction of epinephrine by the body.

It is not surprising that the mixtures we use have large potential toxicity. There are two possibilities of doing something about this particular combination of circumstances, although they have not been well investigated. The first is the substitution for epinephrine of some related compound. Such an attempt has resulted in the product "Corbephrine." It is claimed that this procaine mixture contains an agent which is sufficiently active in producing vasoconstriction as desired, but is not potentially toxic. This claim has not been fully substantiated, to my knowledge, and until a full experimental study has been made of the combination of procaine or other anesthetic with all the members of the epinephrine series, judgment must be reserved regarding the comparative value of such mixtures. Also, recently, the addition of the pressor principle of the posterior lobe of the hypophysis (pitressin) to procaine has been proposed. I have shown[12] that one does obtain in this way a solution which can be sterilized without loss of activity (not possible with epinephrine), and which does give vasoconstriction enough to prolong anesthesia, but not enough to prevent the absorption and fatal result of toxic doses, and the mixture on intravenous injection shows the same increased toxicity that is seen with epinephrine. Furthermore, untoward reactions to injections of posterior pituitary principles are not unknown.

The second possibility is the production of a single compound which will be both anesthetic and vasoconstrictor. There have been scattered attempts to do this, on the basis that since many local anesthetics are benzoic esters of amino-alcohols, and since many of the epinephrine series are amino-alcohols, then their benzoic esters should be both anesthetic and vasoconstrictor. Alles and myself have studied a number of such compounds, we think with some success, although none have gone far beyond the experimental stage[13].

SPINAL ANESTHESIA

I should not fulfill my purpose without saying a few words on spinal anesthesia, although I feel particularly unqualified to do so. It is without doubt the most controversial part of the field; one can apparently be either conservative or radical in its use without catastrophe. Practically, however, it appears that there is no agent other than procaine, by itself, that offers desirable advantages with freedom from dangers. To extend spinal anesthesia over the entire field of surgery is just as unwarranted as the similar use of any other single procedure, and this brings me to mention the *art* of anesthesia, which stands over and above all the remarks that I have made, which must be responsible for the choice out of contributions to its science of what might lead the subject nearer to its ideal.

[12] Knoefel, P. K.: *Proc. Soc. Exper. Biol. Med.* 30: 243, 1932.

[13] Alles, G. A. and Knoefel, P. K.: *Arch. Internat. Pharmacod. Therap.* 47: 96, 1934.

COMPLETE OUTLINES OF POSTGRADUATE PROGRAMS APPEAR ON PAGES 248, 249, 250 IN THIS ISSUE.

GALL-BLADDER DISEASE SIMULATING ANGINA PECTORIS*

LYMAN K. GOULD, M. D.
FORT WAYNE

As a medical student some twenty odd years ago, I was constantly impressed with the differential diagnosis of angina pectoris and the upper acute abdomen and what a grave diagnostic error one would commit if he mistook an anginal attack for a ruptured peptic ulcer or an attack of gall stone colic. I do not recall that I was ever cautioned to consider the reverse, that is the relation of gall-bladder disease as the causative factor in the production of pain usually associated with the anginal syndrome. In recent years, however, more attention has been paid to this relationship, but even now the likelihood of disturbance in the gall-bladder giving rise to symptoms referable to the heart is by no means as universally recognized as it should be. Some years ago, David Riesman[1] made this statement: "That there should at times be difficulty in distinguishing between gall-stone disease and angina pectoris might seem incredible, yet it is true. The facts as I have observed them, are about as follows. In a certain number of patients who have suffered from gall-bladder infection, often unknown to them, cardiac symptoms appear. These vary in character. Quite frequently a systolic murmur is found, usually without any symptoms of cardiac failure. In other cases, in which the myocardium is evidently affected, the symptoms are those of sudden heart attacks characterized by dyspnoea and cyanosis; in still others the attacks are, so far as one can tell, anginal in character. Now it is a curious fact that in nearly every case, at least in my experience, the heart symptoms have disappeared after operation. The importance of this phase of the subject is that one may consider the case a hopeless heart affection and overlook the causative factor, removal of which would cure the cardiac condition. On the other hand many a physician is deterred from advising operation on finding some cardiac disturbance or a heart murmur, because he looks upon it as a contraindication to operation. In reality it is to be looked upon, unless too far advanced or clearly due to an independent disease, as a distinct indication for operation."

Rehfuss[2] found in an analysis of over 900 cases of gall-bladder disease that 39.6 per cent acknowledged the presence of symptoms varying all the way from mild palpitation, tachycardia, and precordial distress to angina. In about ten per cent the symptoms were so suggestive of angina that the differential diagnosis was really difficult.

In the volume on disease of the liver and biliary tract which the late John Phillips[3] completed only a few weeks before he lost his life in the Cleveland Clinic disaster, he remarks, "Occasionally the pain is referred upward to the chest so that it simulates an attack of angina pectoris. I have seen a number of instances of this kind, in which at the time of the attack it was almost impossible to differentiate between gall-stone colic and angina pectoris."

In his remarks about biliary colic, Osler[4] says, "Palpitation and distress about the heart may be present, and occasionally a mitral murmur occurs during the paroxysm, but cardiac conditions described as coming on acutely in biliary colic are due to persistent myocardial degeneration not infrequent with gall-stones." Schwartz and Herman[5] found in a study of 109 patients with chronic cholecystitis that 63.3 per cent had associated myocardial disease as against 41 per cent in 109 non-cholecystic medical cases in identical age groups.

Rolleston[6] has written that, "the absorption of toxin from an inflamed gall-bladder may cause myocarditis, angina attacks and cardiac failure," and "angina and anginoid symptoms in patients with gall-bladder disease may be due to exhaustion of a poisoned myocardium."

Brown[7] has reported cases of cardiopaths with an unsuspected gall-bladder disease relieved by surgical treatment of the gall-bladder. Grahm[8] observed brilliant results in cases of heart disease followed by cholecystectomy after it had been determined that there was a pathological gall-bladder.

As far back as 1909, Babcock[9] called attention to the possibility of myocardial disease being dependent upon chronic disease of the gall-bladder. He cited cases where serious cardiac incompetence, which had progressed far enough to cause dangerous dilatation, had been corrected by drainage of an infected gall-bladder. This was previous to the general acceptance of the theory of focal infection, or the recognition of the gall-bladder as such a possible focus. It became his custom to pay special attention to the possibility of cholecystitis in

* Presented before the Section on Surgery of the Indiana State Medical Association at the Indianapolis session, October, 1934.

[1] Riesman, David.: The Medical Aspects and Diagnosis of Diseases of the Gall-Bladder. *Am. J. Med. Sc.* cliii:492, April, 1917.

[2] Rehfuss, M. H.: Differential Diagnosis of Gall Bladder Disease, presented at Cleveland Clinic Week of American College of Physicians, February 23, 1927.

History of Gall-Bladder Disease—Resumé of Symptoms. *Amer. J. Digestive Dis. and Nut.*, July, 1934.

[3] Phillips, John: Diagnosis and Treatment of Diseases of the Liver and Biliary Tract. *Oxford Univ. Press*, New York, 1930 (p. 482).

[4] Osler and McCrae: Principles and Practice of Medicine. London, 10th Edition, pp. 573 and 784.

[5] Schwartz, M. and Herman, A.: *Ann. Int. Med.*, June, 1931.

[6] Rolleston, H. D.: *Brit. Med. J.*, March 6, 1920.

[7] Brown, T. R.: Libman Anniversary, Vol. I, pp. 265-271.

[8] Grahm, Cole, Copher, and Moore: Diseases of the Gall-Bladder and Bile Ducts, 1928, p. 323.

[9] Babcock, Robert H.: The Diagnosis of Chronic Cholecystitis Complicating Cardiac Lesions. *J. A. M. A.* lxxiii: p. 1929, December 27, 1919.

every cardiac patient who had "stomach trouble" or pains thought to be of digestive origin. Bayard Holmes[10] also claims to have seen a large number of cases of toxic myocarditis from a diseased gall-bladder. W. J. Mayo[11], Williams and Fitzpatrick[12], Kahn and Barsky[13], Roberts[14], Rowlands[15], Miller[16], Weiner[17], Katz[18], Wolffe[19] and Vest[20] are also a few of those who have called attention to this diagnostic confusion and the good results obtained by properly directed surgery. Rehfuss alone seems to prefer to consider both manifestations as due to a common etiologic factor such as infections, rather than to assume that gall-bladder disease has caused myocarditis and he does not feel that cholecystectomy necessarily results in cardiac improvement.

Apart from this indirect relation between gall-stones and angina pectoris, due to remote similarity of symptoms, there are also more direct relations existing between the gall-bladder and the heart. The innervation of the gall-bladder is derived from the left vagus and from the splanchnic through the coeliac plexus, the fibers of which arise from the sixth thoracic to the first lumbar region of the spinal cord. The heart, however, receives its innervation both from the vagus and from the fibers of the thoracic sympathetic system. Fibers from the ventral ramus of the accessory nerve pass out with branches of the vagus and inhibit cardiac action; fibers from the second, third and fourth thoracic spinal nerves, by way of the inferior cervical ganglion, accelerate the action of the heart. The afferent fibers run toward the heart together with the vagus and the cervical sympathetic. Yoell[21] shows the innervation of the gall-bladder and how pathology here might, by irritating the central portion of the diaphragm and the distal branches of the phrenic nerve, the vagus nerve, the intrathoracic nerves and the coeliac plexus, set up impulses which can thus be projected into sensory zones not usually affected by disease in this region.

My attention has been turned particularly toward this problem by the occurrence of four cases in my own practice. Three of these cases came to me with the definite statement that they had previously been diagnosed angina and had been placed on cardiac regime. The fourth case presented a marked anginal syndrome which has been greatly benefited by cholecystectomy. There is, I think, a tendency among medical men generally, once they have discovered any sort of cardiac lesion in a patient, to attribute to that whatever untoward symptoms this patient may manifest, and refrain from looking farther for the cause of some unexplained pain or other manifestation. If such an individual complains of precordial pain, and the physician has recognized previously a cardiac lesion, he is not likely to explore further, but institute treatment for the cardiac disturbance, with no thought of more remote possibilities. Particularly if such pain is experienced only during exercise, or is aggravated by exertion, will the physician be confirmed in his tentative diagnosis and complete rest in bed is likely to be imperatively demanded. If the patient says that his pectoral muscles are sore, or some chance palpation reveals tenderness of the intercostal nerves, it is only the exceptionally thorough clinician who will note that something does not "fit in" with his previous conclusions. It will not occur to him to differentiate between myositis, simple neuralgia, herpes zoster and angina pectoris, and he is still less likely to refer the pain to some relatively remote focus in the digestive tract as the nidus from which the pain may emanate.

More than this, if the patient having a recognized heart lesion makes a complaint of digestive difficulties, these also will usually be referred to the cardiac condition, and no independent investigation instituted to test the truth of the assumption. It is, of course, well known that the effect which certain heart lesions have upon the circulation, does lead to digestive disturbance. The venous stasis attending the sluggish circulation probably brings about certain alterations in the secretions of the stomach and small intestine. The eructation of gas and other unpleasant manifestations is called "stomach trouble" by the patient who naturally does not differentiate between this and the evidences of organic lesions which are only remotely related to the cardiac condition. Furthermore, if the patient lays stress on symptoms referable to the digestive tract rather than the respiratory difficulty, or if the attacks of palpitation occur at night or without the provocation of exercise or excitement, and especially if such attacks are accompanied by epigastric distress, attention should be addressed to the abdominal organs.

[10] Holmes, Bayard: A Form of Heart Disease Due to Disease of the Gall-Bladder. *Am. J. Clin. Med.*, October, 1915.

[11] Mayo, Wm. J.: Certain Medical and Surgical Aspects of Disease of the Biliary Apparatus. *Wis. M. J.*, March, 1924.

[12] Williams, F. A. and Fitzpatrick, J. A.: Relationship of Chronic Infection of the Gall-Bladder to Disease of the Cardio-Vascular System. *J. Iowa St. Med. Soc.*, November, 1925.

[13] Kahn, M. H. and Barsky, J.: Angina Pectoris. *Ann. Int. Med.*, November, 1928.

[14] Roberts, S. R.: The Diagnostic Relations Between the Gall-Bladder and Heart. *Ill. Med. J.*, November, 1929.

[15] Rowlands, R. P.: The Surgical Treatment of Diseases of the Gall-Bladder and Bile Ducts. *Brit. M. J.*, April 9, 1932.

[16] Miller, Chas. H.: The Gall-Bladder and Cardiac Pain. *Lancet*, April, 1932.

[17] Weiner, J.: Medical Clinics of North America, Vol. 17, No. 3, p. 823.

[18] Katz, E.: Thoracic Pain Due to Gallstones. *Medical Record*, Vol. 139, pp. 130 and 170.

[19] Wolffe, J. B.: Angina Pectoris—Its Possible Causes and Treatment. *Penn. Med. J.*, Vol. 36, No. 12, p. 901.

[20] Vest, W. E.: Anginoid Symptoms of Gall-Bladder Disease. *Southern M. J.*, Vol. 27, pp. 410-413.

[21] Yoell, R. A.: Cholecystic Disease Simulating Angina Pectoris. *Western J. Surg.*, November, 1930.

In cases of cardiac disease, enlargement of the liver is the result of passive congestion but when due to chronic cholecystitis in a cardiopath, one may very naturally attribute its size and tenderness to stasis in consequence of the impeded circulation. It is this very circumstance that renders the diagnosis of gall-bladder disease difficult as a complication of cardiac lesions. A valuable sign of gall-bladder disease of corroborative value in some cases is the so-called Ewald's area of cutaneous hyperesthesia on the right lower back just internal to the posterior edge of the scapula over the course of the tenth and eleventh intercostal nerves.

It is apparent, then, that the heart symptoms seen in gall-bladder disease are due to:

1. The closely related innervation of the two organs.

2. A toxic myocarditis due to the absorption of toxins from a chronically inflamed gall-bladder.

The alarming increase of coronary disease and an extremely heart-conscious public demand that we be very careful in our diagnosis and not inflict on our patient the distressing verdict of angina without the most careful study. With the improvement of our diagnostic methods, angina today includes a greater class of patients than it did twenty-five years ago. We regard angina at present as a paroxysmal sensation in the chest, usually under the upper or middle sternum. It is not necessarily an agonizing pain and the fear of impending death formerly greatly stressed as a diagnostic sign is infrequent in White's[22] large experience. It is brought on by exertion or excitement, persisting for a few seconds to several minutes. An attack lasting as long as half an hour is certainly open to question. It frequently radiates to the arms, neck or abdomen, but it is well to bear in mind that often it does not. The distress is relieved by nitroglycerine and if it is not, one should immediately question his tentative diagnosis. The attacks are as a rule often repeated, and are rarely an isolated occurrence except in cases when death comes with the first attack. Three of our cases might have been classed as false angina some years ago, but today such a conclusion would mean that we have not continued our investigation far enough. Furthermore since one-fourth of the cases of angina show an apparently normal heart by all methods of examination—inspection, palpation, percussion, auscultation, blood pressure, x-ray examination and electrocardiography—the diagnosis of false angina should never be made. With these thoughts in mind the analyses of the following four cases have been most interesting to me.

[22] White, Paul D.: Heart Disease. Macmillan Co., 1932, p. 611.

CASE REPORTS

Case I. Mrs. R., married, age 46, first consulted me August 5, 1931. Her chief complaint was dyspnoea and precordial distress on exertion. While she had no radiating pain, the distress was at times quite severe. Her physician had made the diagnosis of angina pectoris. Our examination showed a well nourished woman of 146 pounds weight, temperature 98.6, pulse 72 and regular, blood pressure 124/80. She was markedly tender over the gall-bladder area. The x-ray examination of the chest did not reveal any lung pathology but did show the heart to be enlarged in the transverse diameter. The cardiogram was normal. Cholecystogram gave us a poor shadow with a suspicious negative area. The basal rate was —18 The blood count, urine and Kahn were negative. The patient was placed on thyroid extract, 2 grains, for several weeks, but did not respond. Repeated examination showed persistence of the tenderness in the right hypochondrium and on February 10, 1932, cholecystectomy was done. The gall-bladder was found enlarged and adherent but with no stones. The microscopic examination showed moderate congestion, with round cell infiltration and fibrosis. The recovery was uneventful, the patient leaving the hospital on the tenth day, and to date she has been free from precordial distress.

Case II. Mrs. H., age 69, was admitted to the hospital July 19, 1931, with a diagnosis of angina pectoris having been made by the family physician. When he first saw her she complained of severe substernal pain which radiated to the right arm, shoulder and neck. The patient required a half grain of morphine to give her any relief, and she had vomited several times. During the week's observation she frequently complained of pain throughout the chest and right arm and at times in the epigastrium and the right hypochondrium. Vomiting was frequent and several times she required morphine. The temperature was subnormal, running from 97 to 98, and the pulse rather weak, about 80. The blood pressure was 130/90. The urine showed a 2 plus albumin with a few hyaline and granular casts. The blood urea was 84 mgms. and the urea nitrogen 39.2. The red count was 5,030,000 with 70% hg. The white count was 7,400 with 77% polymorphonuclears. The physical examination of the chest was negative but the x-ray showed a slight cardiac enlargement and slight pulmonary congestion. During the week, marked tenderness developed over the gall-bladder area and a cholecystogram gave a very faint shadow. A diagnosis of a pathologic gall-bladder was made and on July 28, 1931, cholecystectomy was done. Two large stones were found. The recovery was uneventful and to date there has been no return of the patient's angina syndrome.

Case III. Mr. F., age 51, consulted me April 4, 1932, complaining of effort syndrome. He could not walk a city block without having to stop because of epigastric distress which seemed to radiate to

the precordium. Excitement also produced the pain to such an extent that in preceding months he was unable even to listen to the world series baseball games over the radio. For the past several years he had had attacks of epigastric pain with vomiting and all foods seemed to distress him. He was not relieved by soda. Eight weeks previously he had noticed that his stool was clay colored and thought he was slightly jaundiced now. He had lost 12 pounds in weight. Temperature 98.6, pulse 66, blood pressure 130/92. He was markedly tender over the gall-bladder area and otherwise the physical examination was negative. The blood count, Kahn, and urine examinations were negative. Ewald meal showed free HCL 8, and total 18. Cholecystogram gave us no shadow and the barium meal showed the duodenum pulled toward the gall-bladder. Fluoroscopic examination of the heart showed no enlargement and the cardiogram was normal. The icterus index was 25. A diagnosis of gall-bladder disease was made and cholecystectomy performed April 28, 1934, and several stones were found. The recovery was uneventful and his symptoms of effort syndrome have greatly improved. We have felt that this is a case of angina in which the symptoms were accentuated by the gall-bladder disease.

Case IV. Mr. H., age 50, consulted us October 5, 1933. The previous January he had suffered severe pain in the chest radiating into the arms and was confined to his bed for nine weeks. His physician had made a diagnosis of angina pectoris and on his advice the patient had disposed of his business and was leading a very sedentary life. Seven years previously while in Chicago he had had a similiar attack and had also been told by his physician there that he had angina. At the present time he had precordial distress on walking but he was not relieved by nitroglycerine. He had lost ten pounds in weight. He was very nervous and had been told that he had a goiter. Thirteen years previously he had had an appendectomy and drainage. The physical examination was entirely negative; there was no tenderness whatsoever over the gall-bladder area. X-ray examination of the chest showed a tortuous aorta. The cardiogram showed a slight inversion of the T wave in II and III and left axis deviation. The blood count, Kahn and urine were negative. The basal rate was plus 3.6. Flat plate of the gall-bladder without the dye showed several large stones. On the basis of these findings, and especially with a history of seven years between the attacks, we felt that this was certainly a case of referred pain and that he did not have angina. To date he has refused operation for he is so much improved since he has been relieved of his fears of sudden death that he has purchased another business and resumed a normal life.

CONCLUSIONS

The following conclusions are to be drawn from this study:

1. The patient with a diseased gall-bladder, with or without stones, may present symptoms which suggest angina pectoris.

2. The anginal syndrome may be accentuated by a diseased gall-bladder.

3. A number of these patients are cured or improved by cholecystectomy.

4. When the diagnosis has been accurately made, the patient should not be deprived of surgery on the basis of the heart symptoms.

3415 S. Fairfield Ave.

DISCUSSION

ROBERT M. MOORE, M. D. (Indianapolis): This paper stresses the necessity of careful examination and proper evaluation of symptoms. It is, of course, a well-known fact, often discussed in the literature in the last few years, that certain cases of coronary disease have been operated for gall-bladder pathology and no pathology found, the gall-bladder being normal. The reverse is equally true—that many supposed cases of angina pectoris and heart affections have been cured surgically by the removal of a diseased gall-bladder. It seems to me that careful attention to the history, analysis of symptoms, and a proper estimation of the physical findings and laboratory reports are essential in all fields of medicine, and certainly that applies to this subject, as we know that many conditions in the upper abdomen simulate heart disease and vice versa. (This discussion does not include the symptoms resulting from coronary occlusion.)

Given a patient with anginoid symptoms, how are we to determine the causative factor of the pathology? I feel there are two important points: First, a very careful history. Permit the patient to tell his story in his own way, and then obscure details may be clarified by careful questioning. Second, a proper evaluation of symptoms will be a great aid. Pain which is brought on by effort or emotion, or pain which is accentuated by a full stomach, it seems to me, should be suggestive of heart disease. It is often said that pain radiating down the left arm is a sign of angina pectoris. In many groups of cases it is not. I believe it is more important in the mind of the layman than it is to the profession. A substernal pain in the middle or upper third, which is constricting and gives a sense of strangulation, almost always points to heart disease, and when augmented or precipitated by effort or excitement, points to angina. It is interesting that many times patients will give a history of pain to the left of midsternal line, and eight times out of ten, it is the result of some condition other than heart disease. A precordial sensation of tenderness or soreness, breathlessness, and soreness in the left side often point to cardiac complications; but the pain

of angina is usually more lancinating, is shorter in duration, and also more readily amenable to rest and vaso-dilators. Pain of the anginal type tends to immobilize the patient. I had a patient come into my office who had been walking up and down the hall. When he walked in, he said, "I am having an attack of angina." "Angina," I said, "is one thing you do not have. Patients with angina do not walk around and talk about it while in an attack."

Another point of interest is that women are far more prone to gall-bladder disease than men; men are more prone to angina. History of intolerance for certain types of food, also vomiting during an attack, points to gall-bladder. Another point is that the upper stratum of society are more prone to angina than the lower, and vice versa of gall-bladder disease. Above the age of fifty, we usually find more people with angina than with gall-bladder disease. Another important point is that the longer the predominating symptoms have existed, the less likely they are to be of heart origin. The doctor mentioned tenderness over the back and a hypersensitive area, which is important in gall-bladder disease. Gall-bladder disease, when referred to the chest, usually goes to the right shoulder or back and is colicky in nature, often is associated with vomiting and lasts for more than a few minutes. Careful laboratory work is essential. If I had to differentiate between angina and gall-bladder disease, I would rather have a good history than any instrument of precision or any laboratory method that could be employed. Neither of these diseases, as I understand them, are emergencies; certainly emergencies are rare. Therefore, it seems to me that we can always take time for careful study. I have seen only two ruptured gall-bladders during my practice of twenty years. It is interesting to note in Dr. Gould's cases that the first was a woman, not overweight, with a normal blood pressure—a rare physical type to have angina. His second case was a woman who gave a history of recurrent attacks which required a half grain of morphine for relief. She had vomiting and a normal blood pressure—rare in angina.

Nowhere in the whole realm of medicine is there a greater necessity for close co-operation between internists and surgeons than in handling this group of patients. I think all gall-bladder cases should be studied medically before operation, and especially should the heart be carefully evaluated. Likewise, if there is any question as to the biliary phase in the presence of abnormal heart findings, the surgeon's consultation should be invited. In this group of patients, co-operation of the internist and surgeons gives the most satisfactory results.

This paper of Dr. Gould's calls our attention to many important points, and particularly brings out that the correct preparation medically of gall-bladder patients and then good surgery lowers the mortality rate.

GASTRIC POLYPS

W. E. PENNINGTON, M. D.
INDIANAPOLIS

Gastric polyps are rare and occur in a very small percentage of gastric lesions. The tumors may be single or multiple, pedunculated or sessile, large or small, benign or malignant.

Various benign types of similar tumors have been described as fibromyomas, adenomas, papillomas and angiomas. The malignant changes in these gastric tumors usually occur in the gastric walls to which the tumors are attached. To determine the existence of malignancy, a microscopic examination must be done.



Single polypus in the middle third. Biopsy showed a non-malignant growth.

The x-ray will definitely diagnose gastric polyps. Proper manipulation is necessary to throw the mass into profile during the x-ray examination. A proper barium suspension is necessary to show the gastric rugae and the deformity of the wall of the stomach. The barium meal should be of such density and quantity that visualization of the tumor and rugae will be effected.

There are no definite symptoms of gastric polyps. If there is bleeding, a secondary anemia will be present, with weakness and digestive symptoms. The anemia may simulate the pernicious type. Free hydrochloric acid is frequently absent, which,

coupled with a gastric tumor, will strongly indicate carcinoma of the stomach.

Burning pain with belching and sensation of pressure about the mid-epigastrium, indigestion, nausea, vomiting and diarrhea may occur but are not constant. Loss of weight and appetite, prolapse into duodenum with strangulation, torsion, ulceration and hemorrhage are sometimes present.

The laboratory findings are, at times, as follows: low acidity, occult blood, achlorhydria and increased mucus.

X-ray study of the tumor mass, pertaining to position, size, and motility should be made.

Rugae should be studied regarding deformity, change of direction or breaks in folds, and nearness of approach to the tumor mass.

Translucent areas are seen due to the tumor masses projecting into the barium suspension. Some of these shadows may have a light center because of the filling of an ulcerated depression.

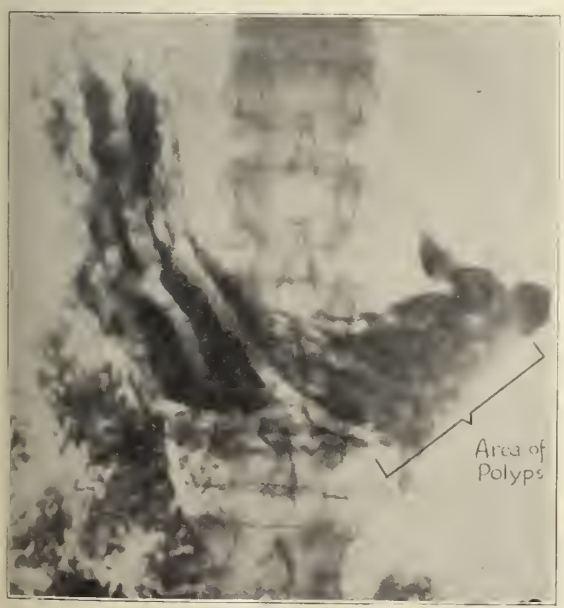
ETIOLOGY

The cause is not known. Continued irritation must be a factor. Absence of hydrochloric acid may allow the incubated gastric contents to be a source of irritation; however, these tumors have been found in the presence of hydrochloric acid. Chronic alcoholism has been present in several cases.

The age ranges from twenty years upward. Most cases occur after forty.

TREATMENT

Surgery has been recommended for all cases of gastric tumor. The writer had multiple polyps to disappear after mild x-ray stimulation. This procedure, however, is not recommended in all cases, and should only be done for a short interval and with caution.



Multiple polypoid growths in the lower third. Note normal rugae in upper two-thirds.



Multiple polypoid growths in the upper third involving the entire cardia. Biopsy showed non-malignant lymphoid tissue.

CONCLUSIONS

In conclusion, the following facts are noted:

Gastric polyps occur rather rarely.

The objective symptoms are usually referable to the stomach, such as low acidity, achlorhydria, increased mucus, occult blood, or deformity of the gastric mucosa.

Secondary anemia follows the loss of blood.

The x-ray may be employed to demonstrate the polyp shadows. This demands a proper barium suspension and proper manipulation of the stomach under the fluoroscopic screen.

Shadows are readily demonstrated projecting into the gastric lumen with subsequent deformity of the mucosa folds.

214 Hume Mansur Bldg.

The Indiana University School of Medicine, the Indiana State Medical Association and ten District Societies, will present programs of unusual merit this month. Attend as many sessions as possible. They are planned for you.

SUBPHRENIC ABSCESS*

J. DUFFY HANCOCK, M. D.
LOUISVILLE, KENTUCKY

The present increased incidence of amebic dysentery will probably leave in its wake cases of amebic abscesses of the liver, some of which will be accompanied by subphrenic abscesses. For this reason, as well as the not infrequent occurrence of subphrenic abscesses from more commonly encountered diseases, a discussion of this type of abscess seems appropriate at this time.

Strictly speaking, a subphrenic abscess is one formed between the dome of the diaphragm and some subjacent organ. Common usage, however, expands the term to include practically any abscess which at any portion touches some part of the diaphragm.

It is well to remember that the under surface of the diaphragm is divided into four peritoneal spaces by the cruciform arrangement of the ligaments of the liver. The right and left anterior areas are the ones most frequently involved. In the former appendicitis, biliary, and hepatic lesions are the common causative factors—in the latter gastric ulcers which perforate subacutely. Posteriorly on the right side the infection generally arises in the renal pouch. The few seen posteriorly in the left side are most frequently due to pancreatic lesions or gastric ulcers perforating through the posterior wall. In addition to these four peritoneal spaces there are two extra-peritoneal ones—a right and left. The one on the right is between the layers of the coronary, lateral, and falciform ligaments, and invasion here practically always follows hepatic infection. The left extra-peritoneal space extends upwards from the cellular tissues about the upper pole of the left kidney which is the usual focus of infection although cases have been reported where the source was an acute periostitis of the transverse vertebral processes. Perforated pyloric ulcers cause almost one-third of the cases, appendicitis over one-sixth, hepatic affections about one-sixth, and the remaining third are due to miscellaneous conditions, such as general peritonitis, diseases of the spleen, duodenal perforations, trauma, thoracic disease perforating through the diaphragm, and lower abdominal infection carried by the lymphatics or through the retroperitoneal tissues.

We may, therefore, consider the subphrenic abscess as arising in one of four ways. It may represent only the extension of a general peritonitis from nearly any cause anywhere in the abdomen; it may represent a local peritonitis from the start following a ruptured liver abscess or gastric ulcer; it may be the result of lymphatic or retroperitoneal extension, and lastly it may be the site of a blood borne implant from a distant focus of infection.

* Read before the Third District Medical Society, November 14, 1934.

SYMPTOMS

The symptoms are usually insidious and often masked by the antecedent disease. While they may be acute following the sudden perforation of an ulcer, suspicion will generally be first aroused by an increase in the evidences of infection appearing fairly late at a time when the original focus should be subsiding. These evidences include a higher rise in temperature, a sustained or increased pulse rate, anorexia, usually marked wasting, occasionally chills, rarely vomiting or hiccough, and practically always pain. The pain is usually most prominent between the axillary lines of the lower thoracic region, eighth to eleventh ribs. The subcostal area of the abdomen, though, is occasionally the site of most intense pain and sometimes due to an accompanying diaphragmatic pleurisy, it may be referred to the scapular or shoulder region. Deep breathing or coughing intensify the pain.

Physical signs may be quite definite. They include bulging and tenderness of the intercostal spaces, the latter being quite marked. In addition to the intercostal bulging a definite increase in the circumference of the lower thorax on the affected side may be observed. Perhaps the most important sign is that, while the liver will be noted to extend below the costal margin, its area of dullness will be found to extend even higher above than normally. An edema of the thoracic wall over the site of the abscess may be a late sign. These signs, as well as lung findings, are variable depending somewhat on the presence or absence of an accompanying pleurisy or pleural effusion. Abnormal tympany and even succussion may be detected in the region of normal liver dullness if much gas is present. If the costophrenic angle is clear the projection downward of the lung into that space will give breath sounds audible below the upper level of dullness. Rales are frequently heard at the base of the lung. Respiratory motion at the costal margin is decreased or absent.

LABORATORY TESTS

Laboratory tests of aid are a white blood count which will show a high leucocytosis, and the demonstration of pus in aspirated material. This latter procedure, aspiration, while heartily recommended by some, seems to be fraught with more danger than is justifiable. I would classify it as one of those trick procedures which should be avoided—certainly in all cases except where the needle can be left in situ and the operation proceeded with. Withdrawing the contaminated needle through a clean portion of the pleural, or less frequently peritoneal, cavity does not appear to be good surgery regardless of the information derived. Aspiration, in addition to demonstrating the presence of pus, may differentiate subphrenic abscess from empyema according to Pfuhl's observation that if the pus flows more freely on inspiration than on expiration, the pus is probably below the diaphragm.

The present-day refinement of x-ray technique is such that frequently such accurate information is obtained as to establish the diagnosis. The two most positive findings are, first, the elevation of the diaphragm with the convexity directed upwards, and, second, the presence of a gas bubble above the fluid level and shifting with a change in position. To secure this change one picture should be taken in the semi-sitting position. This gas, since it may result from the perforation of a hollow viscus or from the activity of gas forming bacteria, is nearly always present. On the left side this, of course, must be differentiated from the usual gas bubble in the stomach.

DIFFERENTIAL DIAGNOSIS

Differential diagnosis, once the presence of pus in the region of the diaphragm is fairly well established, may still be rather difficult; but fortunately, inaccuracy here will not have the disastrous consequences that it might elsewhere, since the treatment of all is drainage. Empyema presents a rather complete absence of breath sounds, usually definite displacement of the heart, more pronounced dyspnea, less downward displacement of abdominal viscera, and a different history. Liver abscess may show some jaundice, the liver will appear enlarged rather than displaced, and the pain may be more severe. It is undoubtedly the most difficult condition to differentiate, but happily the treatment is identical and differentiation therefore is of little practical concern. Perinephritic abscesses are so posterior and so unlikely to produce thoracic symptoms or signs that their diagnosis is hardly ever confusing unless there is an accompanying subphrenic abscess which then will, of course, show the usual findings.

TREATMENT

Once the diagnosis is established or strongly indicated there is no argument as to treatment. The pus must be released. The mortality in those cases where it is not done is practically 100%. Subphrenic abscess is a terrible disease and even when properly treated by adequate surgical drainage presents a shocking mortality of about thirty per cent. Since there is usually so much delay in making the diagnosis, a further wait for localization by inflammatory adhesions is unnecessary. The method of approach is still debatable. Some advocate the anterior peritoneal route through an abdominal incision. While it offers the advantage of adequate exploration, contamination of protected portions of the peritoneal cavity is probable regardless of the care used in placing gauze packs to limit such invasion. The thoracic approach from the side or back may be subpleural or transpleural. While I have been successful once in staying below the pleural reflections which I was able to push upwards I am convinced that the approach usually necessary will be a transpleural one. It is not particularly difficult and can be done under local infiltration anesthesia. About two inches of the appropriate rib are resected and the pleural cavity entered unless one is fortunate enough to find the costophrenic angle obliterated. In that latter case the bulging diaphragm may be aspirated and incised, drains inserted and the operation completed. If such obliteration has not occurred, the pleural surfaces may be sutured circularly and the operation proceeded with. However, a safer plan to prevent pleural contamination consists in packing off a circular area with gauze, aspirating the cavity to demonstrate the presence of pus and several days later, when adhesions are well established, incising the diaphragm and inserting the drains. In the post-operative care, irrigation of the cavity with Dakin or hychlorite solution may be indicated since the fibrinous exudate, resembling somewhat that seen in empyema, may be too thick to drain satisfactorily and may cause considerable toxic absorption until removed. If gauze pads have been used to encourage adhesion formation, they should not be removed until they loosen of their own accord. General supportive treatment should be given and the patient instructed to assume in bed most of the time that position most suitable for gravity drainage. The convalescence will be slow.

The particular case that led me to present this subject follows.

CASE REPORT

The patient was a male, age 46, whose usual health was excellent except for chronic maxillary sinus disease requiring almost continuous treatment. His family history was essentially negative. His wife and four children were quite well. In covering his territory as a traveling man he had occasion to visit several states adjacent to Kentucky, but had not been to Chicago for several years.

One week before I was called to see him, he became suddenly ill with a severe pain in his right shoulder. This pain resembled a previous attack which was diagnosed as "neuritis," with this difference that the pain was now accompanied by extreme prostration, which, however, he attributed to the unusual hot weather then prevailing. However, he became progressively weaker and maintained a high fever, but had no chills and no jaundice. The day before I saw him he developed severe pain in the right subcostal region.

At the time of my examination, there was a tender mass palpable below the right costal arch. Otherwise his abdomen was practically normal—no masses, tenderness, or distention. His white count was 27,000 with 90% polymorphonuclear leukocytes, his icterus index was normal, and his temperature was 102.4°. He was dehydrated and exhausted. Respiration on the right side was slightly embarrassed. It was then my impression that he had an acute cholecystitis, well localized,

and probably a diaphragmatic pleurisy. I suggested that temporarily we use local applications of ice, force fluids, and give adequate rest.

His course was progressively worse. While he ate fairly well and had no digestive disturbance, he gradually became weaker and continued his high fever. The pain in the right subcostal region moved upward and involved the right side of the chest as well. Breath sounds there were diminished, a few subcrepitant rales were heard, and percussion was definitely impaired. X-ray examination revealed an elevated diaphragm on the right side and our diagnosis was changed to subphrenic abscess.

A transfusion was given and a two-stage drainage operation, as previously described, was done. A culture of the aspirated pus was reported as hemolytic staphylococcus. The patient showed a slight improvement during the following ten days but then developed a profuse foul diarrhea. It seemed impossible to replace the fluids he lost through the intestinal tract. Stool examinations were negative at first, but finally some actively motile entameba histolytica were found. Active emetine therapy was begun but proved unsuccessful.

Since the operation was a transpleural one and since no autopsy was secured, I am unable to state positively whether or not there was an accompanying liver abscess or empyema of the gall-bladder. The decrease in the size of the subcostal mass after operation, however, would tend to eliminate the question of acute gall-bladder disease. For me, the interesting consideration in this patient's case was the location of his primary focus of infection. In view of the culture obtained, I think it quite likely that the sinus was the offender and the subphrenic abscess resulted from septic emboli. An amebic abscess of the liver may offer a possible explanation, but I am inclined to believe that the amebic infection was limited to the intestinal tract and was present during only the late stage of his illness when, because of his decreased resistance, old inactive amebae assumed the active form. Such a possibility has been mentioned in recent literature.

Our consideration of this subject has been too brief to justify a summary, but in conclusion, I would like to suggest that, if the possibility of a subphrenic abscess is borne in mind, cases will be recognized earlier and more frequently with a resulting lowered mortality and shorter period of disability.

516 Brown Bldg.

A PHYSICIAN'S EDUCATION IS
NEVER COMPLETED
THIS IS POSTGRADUATE MONTH
A WORD TO THE WISE - - !

TREATMENT OF LARYNGEAL TUBERCULOSIS*

W. E. STEWART, M. D.
TERRE HAUTE

Tuberculosis of the larynx usually follows a primary pulmonary disease, although there are other avenues by which the infection may reach the larynx. Wood's opinion is that the bacillus may gain access to the subepithelial tissues from the surface in four ways: (1) Through the unbroken epithelium. (2) Through the ducts of the racemose glands. (3) Through traumatic abrasions. (4) Through pathological epithelium.

In the unbroken epithelium it is reasonable to suppose that it may pass through the normal epithelium of the tonsil crypts or through the lymph follicles on the posterior pharyngeal wall. The racemose glands occur notably in the ventricles and subglottic regions and though we have no positive evidence that they act as a gateway of infection, it is entirely within the scope of probability that such at times take place.

Traumatic lesions may be produced by a severe cough but actual trauma of the vocal cords and other portions of the larynx produced by a cough is very uncommon. There is little doubt that the pyogenic bacteria can produce a condition of the laryngeal mucus membrane which makes it possible for tubercle bacilli to gain entrance.

The treatment should consist of removing the predisposing factors capable of producing a catarrhal condition of the larynx. These factors are nasal obstruction or disease, tonsillitis, pharyngitis, frequent colds, excessive use of alcohol, tobacco, dust, and smoke. If possible, these conditions should be removed.

The earlier the diagnosis is made and proper treatment instituted, the more favorable is the prognosis. As tuberculosis of the larynx is usually secondary to pulmonary tuberculosis, to treat the larynx and disregard the infection in the lung is ignoring the main issue. Absolute rest of the voice and lung is essential. Only cases with arrested activity in the lung should be allowed to come to the office for treatment; otherwise, the laryngeal infection should be treated with the patient in bed. A sanatorium, of course, is the ideal place for such patients, but due to the increase in the number of cases, our state facilities are not adequate to meet all the demands. Home treatment can be made efficient through outdoor sleeping, or sleeping on a porch with a southern exposure. A full nourishing diet is essential. Eating between meals is recommended for those patients whose weight is not up to standard. Regulated exercise should be taken as soon as the activity in the larynx and lungs subsides.

* Presented before the Indiana State Medical Association, Section on Ophthalmology and Otolaryngology, Indianapolis session, October, 1934.

MEDICAL TREATMENT

Given a larynx which is definitely diagnosed as tuberculous, the results of local medical treatment depend upon the character of the lesion, the extent of the lesion, the condition of the lung, and the resistance of the patient. If the laryngeal lesion is seen early, the invasion is limited, the patient's general condition is good, and the lung lesion is under control, a cure may be expected under appropriate local treatment. If the laryngeal lesion is advanced through neglect or improper treatment, the lung lesion is controlled and the patient's general condition is good, the prognosis as regards the larynx is good, if proper local treatment is carefully carried out. If the lung lesion is uncontrollable, or the patient has little or no resistance, the prognosis is hopeless, regardless of the extent of the laryngeal lesion. In these hopeless cases, careful treatment may and often does check the laryngeal lesion or even improve it to a certain extent, but almost invariably the disease progresses to a disastrous finish. In advanced hopeless cases, while cure or arrest of the disease is out of the question, enough good may be done by appropriate treatment to save the patient from a great deal of pain and discomfort and lessen the agonies of dysphagia and odynphagia (pain on swallowing). The local treatment of tuberculosis of the larynx (excepting cautery methods) is necessarily applied to the surface lesions. According to Lukens, clinically 25 to 30 per cent of pulmonary tuberculosis cases have laryngeal involvement. Many cases of tuberculosis of the larynx are unrecognized clinically, due to lack of routine laryngeal examinations, and receive little or no treatment. The most important local treatment is vocal rest.

In 1921 Dr. Lukens began to experiment with local application of chaulmoogra oil to the tuberculous larynx. Until this time he and his colleagues were very skeptical in regard to arresting tuberculosis of the larynx, as they could not recall one definitely arrested case in six years' experience with tuberculosis laryngitis. Blocking of the superior laryngeal nerve for dysphagia had been the almost daily occurrence. At the present time, however, since the results of the local application of chaulmoogra oil have been so gratifying, the use of alcohol injections in the Jefferson Hospital and Phipp's Institute have been reduced to an occasional one. Cases of dysphagia are now the exception rather than the rule. In his opinion, chaulmoogra oil is the best medical treatment for tuberculosis of the larynx that he has used up to the present time.

Chaulmoogra oil is obtained from two varieties of trees and is known as Indian chaulmoogra oil and Burmese chaulmoogra oil. The Indian oil is a fixed oil, expressed from the seeds of Gynocardia odorata, a native tree of the East Indies. It contains only a small percentage of chaulmoogric acid and its properties are due to gynocardic acid. This is the false chaulmoogra oil and is of apparently little value in treating tuberculous laryngitis. The Burmese oil contains less gynocardic acid and is the oil we use at the present time.

Chaulmoogra oil may be used either in the diluted form (10 to 20 per cent in mineral oil) or full strength. There is no ill-effect following its use if properly applied. If the drop instillation method is carried out, care should be taken that the oil is dropped into the larynx; it is highly irritating to the mucosa of the stomach, and if repeated quantities are dropped into the stomach a violent gastritis may be produced. In the early stages of tuberculous laryngitis with slight infiltration or small ulcerations, the oil acts fairly quickly. In more advanced cases a rather long time is required for results as regards healing. Where dysphagia is present, relief often occurs in a short time and while the dysphagia may persist for some time, still there is almost immediate relief to a more or less extent from the first treatment. Chaulmoogra oil may also be applied directly to ulcerations by the swab method. This method is especially valuable when the ulcerations are on the epiglottis or the arytenoid. Daily applications are unnecessary and might cause undesirable reactions. Both methods of treatment require practice to be effective and many failures of chaulmoogra oil treatment are due to faulty technic.

(The best illustration of the value of chaulmoogra oil was brought out by lantern slides loaned by Dr. R. M. Lukens of Philadelphia. The illustrations showed several cases healed by the oil treatment, others by the combined cautery and oil. Dr. Lukens warns us not to do injury to the cord with the cautery; that is a very timely suggestion.)

Cocaine anesthesia to the palate, uvula, oropharynx, and the larynx usually is required in the swab method until the patient learns to tolerate manipulations in the region of the larynx. However, the patient quickly becomes accustomed to the procedure and cocaine can be dispensed with after a few treatments. Chaulmoogra oil treatment is applicable to ulcerative, tuberculous laryngitis and superficial infiltrations.

SURGICAL TREATMENT

With the exception of tracheotomy, for laryngeal obstruction, external operations for tuberculosis of the larynx are almost never a proper procedure. The electric cautery is undoubtedly the best surgical method of treating laryngeal tuberculosis and the results attending its proper use have taken this disease out of the list of laryngological nightmares.

CASE REPORTS

Miss M. T.: Advanced case of pulmonary tuberculosis, first complaint October 12, 1929, of pains in the chest and back underneath the shoulder blades, rales in upper right, pleurisy on lower left. Test of sputum positive for tuberculosis. Wasser-

mann and Kahn negative. In January, 1931, the case was more advanced; patient complained of aphonia and dysphagia.

Examination of larynx showed both arytenoids swollen and pear shaped; aryepiglottic fold and right vocal cord were ulcerated. Smear from larynx was positive for tuberculosis. During her entire illness she had complete rest in bed. Chaulmoogra oil treatment by the swab method was given three times a week. Improvement was very slow. We gave her five drops three times a day internally and at the end of the third day she had distressing abdominal pains and vomiting, so this method was discontinued. The throat treatment was continued three times a week and at the end of six months she had regained her voice, and had no dysphagia. Smear from the throat was negative, but sputum was positive for tuberculosis. She died of tuberculosis in the latter part of 1932.

Mrs. M. H.: Chief complaint was hoarseness and dysphagia following influenza, and chronic cough. Right upper lung was involved; sputum and throat swab positive for tuberculosis. Wassermann and Kahn tests were negative.

Laryngeal examination: Epiglottis negative, arytenoids swollen, small ulcers in the interarytenoid folds. Swab of chaulmoogra oil seemed to irritate the throat, so the oil was mixed with blandine compound and used as a spray three times a day. This case was not followed up as the patient moved to a different climate. Afterwards she wrote for a prescription of the oil she was using and stated that she was greatly improved.

Mr. J. V.: Came in November 30, 1931; chief complaint was loss of voice; could not talk above a whisper. Pain in the throat. Slight discharge of mucus from nose. Throat: Tonsils slightly enlarged, anterior pillars red; granulation of the post pharyngeal wall. There was redness and swelling of the ventricles and the epiglottis was swollen about two-thirds more than normal size. It was studded with yellow mucus elevations.

X-ray of chest was negative. Temperature was 101. Wassermann and Kahn tests were negative. Throat swab and sputum negative for tuberculosis. This was very suspicious of beginning early tuberculosis. He was put on chaulmoogra oil and in two weeks he had regained his voice. Practically all the swelling was gone from the ventricles and epiglottis. Cord apposition was good. This patient was kept under treatment for a month. He has had no further trouble.

Mr. C. N.: Patient reported in March, 1929. Chief complaint was pain in the throat and loss of voice; also swelling on the right side of the throat and difficulty in swallowing. Present illness began about a year ago with pains in his chest, coughing, and loss of weight. Noticed the pains in throat and difficulty in swallowing about two months before he came under observation; voice was husky. Examination: Nose: post-nasal discharge of mucus. Throat: Dry, mucous membrane anemic. Arytenoid folds and epiglottis greatly swollen; air passage almost entirely closed. There was a distinct swelling on the right side of the neck down the sterno-cleido muscle to the clavicle, which was very tender to pressure. Chest: Numerous rales over the apices of both lungs. Smear from the throat and sputum positive for tuberculosis. Wassermann and Kahn tests were negative. Temperature 101. X-ray made of entire chest, report as follows: The heart is small, and is of the elongated type. The pericardium is adherent to the diaphragm. The thoracic aorta is normal. There is no fluid in the chest. The diaphragm on both sides is adherent about the middle to the pleura. There is much thickening of the bronchi and bronchioles on both sides. The entire upper lobes on both sides are involved with much scar tissue. Both apices are practically obliterated. There is not much pathology below the upper lobes both sides. X-ray diagnosis: chronic tuberculosis with much consolidation in both upper lobes. Patient was sent to the country and given chaulmoogra oil to swab his throat and fifteen drops of the oil internally a day. He regained use of his voice in 60 days and improved rapidly until 1931, his throat became negative for tuberculosis but sputum still contained a few to the field. X-ray examination was made of the chest, for comparison, on December 30, 1930, when the report was, "There is more consolidation in evidence than in the previous examination." X-ray report September 12, 1932, was as follows: "The infiltration in both apices is less than that of the previous examinations. The appearance is that of a coarse, fibrous infiltration with a limited amount of parenchymal change, indicating that the lesion is less active than at the previous examinations." X-ray report October 5, 1934: "The apices of both lungs show a complete obliteration to the level of the anterior end of the first ribs. Below this level on both sides there are irregular areas of decreased density, which are highly suggestive of cavitation. The involvement is still greatest on the right side and extends well down into the hilus shadow. There has been an increase in the chronicity of the lesion and also some apparent extension." At this time the x-ray diagnosis was: "Pulmonary tuberculosis with cavitation." Smear taken from throat, October 5, 1934, was negative for tuberculosis.

Mr. P. S., age 39: Chief complaint, March 15, 1933, hoarseness and chronic cough for past two months. Has raw feeling in the throat and pain on swallowing. Past history: Always has been well except for an operation for fistula one year ago. Family history: One sister died of tuberculosis; one sister died from heart trouble.

Examination: There was marked dullness in the apices of both lungs. Temperature was 98 degrees in the mornings, 99 degrees in the afternoons. There was slight swelling of the right ventricle and

ulcers on right vocal chord. Examination of sputum and swab from throat was positive for tuberculosis. X-ray taken of the chest resulted as follows: "There is a marked increase in hilus shadows on both sides, and scattered throughout the upper half of both lung fields there is a large amount of dense, irregularly distributed, parenchymatous infiltration. There is a very marked pleural thickening on both sides, especially on the right in the region of the apex. An ovoid area of rarefaction is seen on the left side at the level of the anterior end of the first rib and another on the right side at the level of the second rib. These do not appear entirely characteristic of cavitation, but rather a combination of pleural thickening and parenchymal change. Both bases are comparatively clear. The cardiac shadow is within normal limits. The findings indicate an extensive tuberculous involvement of both lung fields, somewhat greater on the right, of moderate activity; that is, the case is old and not fulminating. X-ray diagnosis: Pulmonary tuberculosis; pleurisy, bilateral. He was given swab with chaulmoogra oil and instructed how to use it three times a week at home. On August 8, 1933, an x-ray picture was made with the following report: "There has been no appreciable change in the lung findings since the previous examination. The amount and density of the parenchymal infiltration in both lung fields is the same as before." October 5, 1934, reports he is almost free from cough, no pain on deglutition, and swelling of the right ventricle had disappeared. He had some roughness of the right cord which would account for his slight hoarseness.

DISCUSSION

D. O. KEARBY, M. D. (Indianapolis): We appreciate Dr. Stewart's bringing us this treatment for tuberculosis of the larynx by Dr. Lukens, who is a safe and sound conservative physician, whom you can listen to and depend upon for what he says. His work in Philadelphia is in the tuberculosis hospital where he does bronchoscopy.

I think what has been said here about chaulmoogra oil is dependable. That treatment is easier to give than the cautery treatment. In treating a patient, it strikes me that if we are trained to use the laryngeal syringe this would be safer, because it is easy to traumatize the larynx with an applicator. Probably few of us see many cases of tuberculosis of the larynx unless working in a tuberculosis hospital. It is alleged that in early cases of lung tuberculosis, twelve per cent have tuberculosis of the larynx; in the secondary stage, twenty-five per cent; and in late stages, around fifty per cent. It is my opinion that in private practice these percentages are entirely too high. Dr. Vanderveer, who lives in El Paso, Texas, studied statistics in the army hospital in his city, 2,400 cases over a period of three years; 3.75 per cent had tuberculosis of the larynx. In a private hospital, twelve per cent were reported and in another hospital seven per cent were reported. I believe that most of us consider tuberculosis of the larynx secondary; occasionally a primary case is reported. I believe that all of us think that the larynx and cords, being continuously bathed with tubercle bacilli, retained in the sputum, is the cause. We would like to know how many cases of tuberculosis of the larynx have existed without diagnosis. Autopsies have been done on people who had tuberculosis of the lung and it was found that they had tuberculosis of the larynx which clinically could not be determined. Pathology in tuberculosis of the larynx is, first, inflammation; second, edema; third, ulceration or formation of tuberculoma, fibrosis, perichondritis or all.

In the formed tubercle there is no blood supply, hence they break down easily. Healing takes place by a deposit of calcium salts or fibrosis. Fibrosis with cicatrization is the desired end result. It is thought that the irritation stimulates epithelial cells and they change to fibroblasts, and fibrosis tissue forms. One must understand the pathology to attack or cure it.

Like Dr. Stewart, I haven't seen many cases. Three cases of tuberculosis of the larynx, with pulmonary tuberculosis, recovered without any topical applications to the larynx. In another case with tremendous involvement, we did a tracheotomy so that the patient could breathe. In these early stage cases I am inclined to think that they get well when the tuberculosis of the lung is properly treated and the larynx put at rest. With ulceration, the patient is in the secondary stage. Since we desire to heal by fibrosis and cicatrization, the cautery can be used. You do not try to kill the organism by cautery—only use the cautery to stimulate fibrosis.

The Vanderveer article is very readable. He quotes nineteen authors or writers who have treated tuberculosis of the larynx by the cautery method and all felt that that was the method of choice in ulcerated cases.

The electric cautery is used when there is no response to rest. Electric cautery heals not by destruction of tissue but by development of fibrosis which hastens cicatrization. In the next case that I see early, I will treat by rest and chaulmoogra oil as described by Dr. Stewart. If these fail, I think the cautery should be used.

DR. STEWART (closing): Dr. Kearby remarked that possibly some of my reported cases were early ones. Most all of the cases reported had advanced lung lesions with a history of hoarseness, aphonia, pain, or odynophagia. Dr. Kearby has brought out the salient points in the proper use of the cautery. What is desired is to promote healing. You do not want to produce traumatism but use the cautery to stimulate fibrosis. In the early stages of tuberculosis, results in treatment with chaulmoogra oil, in most cases, are obtained in a short time. In more advanced cases, with ulceration, a longer period of treatment is required.

VALUE OF OXYGEN THERAPY IN MEDICINE*

A. C. NICKEL, M. D.
BLUFFTON

Oxygen therapy is one of the recent important advances made in medicine. Although oxygen was discovered by Priestley in 1744, was linked with metabolism by Lavoisier in 1777, and was used to some extent by Beddoes in many conditions in 1798, it was really Haldane in 1917 who gave us the modern conception of oxygen therapy and its possibilities. During the World War, many soldiers who were poisoned with gas, or who developed pulmonary edema or pneumonia, were treated with oxygen with very good results. Since then research work in Europe as well as the United States has confirmed this work and extended it to other fields.

The purpose of this paper is twofold: (1) To enumerate the various conditions in which oxygen treatment is beneficial, and (2) To emphasize the things fundamental in the successful operation of an oxygen tent. There is an old saying, "Man may live weeks without food, days without water, minutes without air." In considering the various fields in which oxygen therapy is beneficial, one idea is paramount throughout. Oxygen therapy is indicated in any condition of acute anoxemia. Stated in simpler language, oxygen therapy is helpful in any condition of oxygen deficiency or "oxygen want," as seen or observed by the physician or as told and felt by the patient.

The simplest form of anoxemia or oxygen want is that seen in mountain sickness. Yawning also really is nature's attempt to overcome anoxemia. Cyanosis is a clinical test for anoxemia. However, the two are not always comparable since marked anoxemia may occur without cyanosis; on the other hand the degree of anoxemia may not parallel the degree of cyanosis. In many instances, however, cyanosis is a fairly reliable index of anoxemia.

The most frequent condition aided by oxygen therapy is pneumonia. In pneumonia a large part of the lung or lungs is incapacitated. The patient tries to compensate for this loss of lung-space by increasing the rate and depth of inspiration. However, this is painful and, therefore, we have shallow breathing or shallow hyperpnea. Consequently, a great deal of residual air is not ventilated, and we get increased carbon dioxide accumulation with improper oxygen ventilation. With the use of the oxygen tent, or chamber, there is relief of this anoxemia or cyanosis due to increased oxygenation of the arterial blood. This results in a decreased respiratory and pulse rate, then a relief of the pleural pain, also relief of restlessness and a drop in temperature. In other words a relief of the symptoms of anoxemia. Pulmonary edema, acute bronchitis, massive pulmonary collapse or any form of pneumonia is benefited by oxygen therapy. To get the best results, it is essential to start oxygen therapy as early as possible; in pneumonia, preferably as soon as the diagnosis is made.

In circulatory diseases, oxygen therapy is beneficial if there is an anoxemia. The anoxemia in this group is usually due to blood stasis and is not quite as urgent as is the anoxemia due to incomplete oxygen saturation of the blood. However, in acute coronary artery thrombosis and sometimes angina pectoris, oxygen therapy relieves the respiratory embarrassment and increases the oxygen supply to the tissues with less actual work required of the myocardium. In this manner, a case of acute coronary artery thrombosis which would terminate fatally, may be supported until the myocardium has a chance to adjust and repair itself sufficiently to maintain life.

Acute heart failure from any cause whatsoever, attended with cyanosis and marked dyspnea, also merits oxygen therapy. It often greatly relieves the patient and may be life saving. Congestive cardiac failure with or without fluid, and with decreased oxygen saturation of arterial blood also may be helped by oxygen therapy if given over a period of three to six weeks.

Certain mental diseases may be benefited by oxygen therapy. According to Lovenhardt, catatonic dementia praecox patients may have lucid intervals of about twenty minutes by hyperoxygenation, with the addition of carbon dioxide, evidently implying an anoxemia of the nervous tissue. Epileptiform attacks have been terminated abruptly in twenty cases by Murphy, by giving oxygen. He states that in two or three breaths the patient is completely relaxed. Asthma, according to Meakins, is promptly relieved by oxygen therapy. Diabetes also is supposedly benefited by it.

Poisoning by any substance which decreases the respiratory efficiency should be benefited by oxygen therapy. Oxygen combined with carbon dioxide is beneficial in poisoning with morphine, strychnine, chloroform, carbon monoxide, ether and alcohol. Long states that oxygen and carbon dioxide is the method of choice in the treatment of acute alcoholic coma. The patient is given gastric lavage, put in an oxygen tent, and in a few hours he can leave the hospital in a fairly sober condition. Oxygen is also used for the mother in obstetrics as well as for atelectasis of the new born.

A new conception of oxygen therapy was brought forth by Hill who showed that healing of wounds was markedly stimulated by the use of oxygen therapy. Meakins has suggested that the heat helps the local conditions by increasing the blood supply which in turn increases the oxygen content of the blood and tissues; and that it is this excess oxygen which is the healing factor.

Then there is the large group of post-operative conditions, which overlap the other classifications but which merit consideration together because of

* Presented before the Section on Medicine of the Indiana State Medical Association, Indianapolis session, October, 1934.

their abruptness of onset, their seriousness, and the ease with which fatalities sometimes can be averted by prompt oxygen therapy. The post-operative causes of anoxemia are legion, from relaxed tongue, edema of or pus in the trachea or larynx, to a paralysis of the vagus, or tight chest bandages or secondary hemorrhage. It is not so much the retarded carbon dioxide elimination as it is the reduced oxygen intake that calls for oxygen therapy. Some of the post operative conditions quickly benefited by oxygen are:

1. Post operative shallow-breathing.
2. Cheyne-Stokes breathing.
3. Shallow breathing due to spinal anaesthesia.
4. Post operative shock.
5. Pulmonary edema.
6. Asthmatic conditions.
7. Post operative thyrotoxicosis of hyperthyroidism.

Any or all of these conditions usually are quickly relieved by oxygen therapy. Some patients like hyperthyroid patients are especially sensitive to anoxemia and their symptoms yield readily to oxygen therapy. Thus, in general most cases of acute anoxemia can be benefited by oxygen therapy, if promptly and properly administered.

ADMINISTRATION OF OXYGEN

The second part of this paper deals with the information necessary to properly administer oxygen. Most physicians are afraid to admit their ignorance concerning the actual operation of a tent, or chamber; or they are afraid to ask questions and learn because they feel it is too difficult, especially the chemistry. The necessary chemical knowledge can be acquired by any normal individual in five or ten minutes, and the actual knowledge of how to run a tent can be acquired in just a few minutes more. So let no physician hesitate to learn the actual technic. It is simple, and once you know it, you never forget it.

There are several factors to be considered: the tent, the oxygen tank, the soda-lime, the motor, and the ice. Some tents are operated with a motor, others with the pressure of the oxygen gas, and others with convection currents, but the underlying principles are the same.

Naturally, the ice chamber is filled with ice (not dry ice). If the pieces of ice are large, they will last longer. A little water should be poured through the drain to see that it is open, and to make a water trap so the oxygen will not escape through it. Then the soda-lime chamber is filled with soda-lime (usually a number four to eight mesh). After the tent is placed over the patient it should be adjusted to the proper height so that the patient can see out of it easily. The patient may lie flat, or with head and back elevated as suited. Preferably, a rubber sheet is placed just under or over the mattress to prevent the oxygen escaping through the porous mattress. For a similar reason, the ends of the tent fabric are tucked snugly under the mattress in back and on the sides; and in front are covered or folded with the bed covers. The oxygen tank is then turned on and the gauges adjusted so that there is a flow of seven to eight liters per minute. In the beginning, one can start with ten to fifteen liters until one is reasonably sure that the tent is filled with oxygen. If the tent has a motor, don't forget to turn on the motor.

In about twenty to thirty minutes, the air should be analyzed for the oxygen content. Most manufacturers supply the necessary equipment for analyzing the carbon dioxide and the oxygen content of the air. The actual determinations are simple. A measured sample of the air is drawn directly from the tent into a glass chamber and mixed for a minute with the solution of potassium hydroxide in this chamber. Then the solutions are leveled on a base line and the percentage of carbon dioxide absorbed is read off directly on the calibrated tube. The remainder of the air is then bypassed into another chamber containing ammonium chloride, ammonium hydroxide and copper. Here it is mixed again and then the solutions are again leveled and the percentage of oxygen absorbed is also read off directly on a calibrated tube. According to the results found, the oxygen flow is regulated and the carbon dioxide is replaced when needed. The oxygen content should be from 40 per cent to 60 per cent, and preferably between 50 and 55 per cent. This makes it approximately 2.5 times the content of oxygen found in ordinary air. The soda-lime should be changed when the concentration of carbon dioxide reaches 2 per cent, or above, unless it is deemed advisable to raise the concentration to increase the depth of the respirations. In such cases one can let the carbon dioxide accumulate until it reaches 4 per cent or 4.5 per cent. Some men believe that a concentration of 4 per cent to 5 per cent has a therapeutic effect in pneumonia, but the exact results are yet debatable. The oxygen and carbon dioxide determination should be made from two to five times a day. Often the clinical picture will help make the decision, depending upon the pulse rate or the amount of cyanosis, dyspnea, fever or hyperpnea. Next to the oxygen and carbon dioxide determination, the pulse is the most constant means of determining the amount of oxygen needed. If possible, it is best to have a special nurse twenty-four hours a day.

These are the essentials needed in running a tent. However, there are some suggestions which are often helpful. If a rubber sheet is not used next to the mattress, the carbon dioxide accumulates slower, but quite a bit more oxygen is needed to maintain the proper concentration. A thermometer inside the tent gives a more accurate idea of the amount of ice and the rate of flow of oxygen needed; it also shows by a rising temperature when something has gone wrong. The patient usually feels best when the temperature in the tent is between sixty-two and sixty-eight degrees F. The temperature can be controlled by changing the speed of the motor or by regulating the shutter

which governs the size of the opening through which the circulating air must pass.

The ice chamber needs refilling occasionally. Be sure to turn off the oxygen tank when opening the ice chamber. Also stop the motor at this time; otherwise it will suck all the good oxygen out of the tent. If the drain is stopped up, the melted water accumulates, acts as a water trap and eventually prevents circulation of the air. Very promptly the temperature rises and the patient gets uncomfortable and cyanotic. Excessive humidity (over 50 per cent) in an oxygen tent is harmful. When the temperature is around 65 degrees F. the humidity is reduced because the air is passed over the ice, and because of the low temperature.

The soda-lime should be changed once in twenty-four to forty hours, depending on the carbon dioxide content. New soda-lime works better if it is moistened just a very little with water, like a sponge works better after it is first moistened.

Bedding should be changed as needed but this maneuver should be performed as quickly as possible. The patient either needs the tent or does not need it. If he needs the tent, he should not be out more than necessary. Giving the patient the tent only a few hours a day is considered by some as a waste of oxygen. However, gradual withdrawal of the tent must be tried to ascertain when the patient can get along without it.

There are two dangers of oxygen therapy: fire and too high oxygen concentration. With oxygen tents the fire hazard is relatively slight. Oxygen is not explosive in itself, but it supports and enhances combustion whenever it is present. Thus, grease should not be used on any connection and smoking should be carefully watched. A too high concentration of oxygen (around 80 per cent) has been shown to be harmful to lung tissue. Over 60 per cent concentration of oxygen at sea level also is injurious to lung tissue.

CONCLUSIONS

1. Oxygen therapy is of great value in pneumonia or any respiratory condition causing acute anoxemia, selected cases of circulatory disease, many post operative conditions causing shallow breathing, shock, some cases of asthma, diabetes, central nervous system disease; and in general, in any case of acute anoxemia, irrespective of the primary cause.

2. There are only a few fundamental things necessary in using an oxygen tent, which every physician should consider it his duty to know. When a physician once uses an oxygen tent, he will want one in readiness at all times; for, knowing its merits, he will feel as helpless in treating anoxemia without oxygen, as he would feel in treating diabetic coma without insulin.

DISCUSSION

C. J. CLARK, M. D. (Indianapolis): I would like to ask Dr. Nickel as to the advisability of administering oxygen by means of a catheter in the absence of an oxygen tent.

DR. ALLEN C. NICKEL: In giving oxygen per catheter the physician gets very good results, but he does not get the efficiency with a catheter that he would with an oxygen tent. If you get 40 per cent oxygen with a catheter you have done well. Of course, administering oxygen by catheter is much better than no oxygen in an emergency. In visiting with Dr. Waters of Madison, Wis., recently, I saw his apparatus, consisting of a catheter and a safety bottle with the oxygen gas continually bubbling through the water, and with such a means an expert can get good results. However, this method of administering oxygen may be rather obnoxious to the patient and often irritates the nasopharynx, while an oxygen tent or chamber is usually more efficient unless the patient is delirious and very restless.

IMMUNIZE NOW—STAMP OUT DIPHTHERIA

May Day—Child Health Day—has become an established institution throughout the United States. It was inaugurated in 1924 by the American Child Health Association for the purpose of calling the attention of parents, communities, and the public in general to the need for measures to protect the health of children.

In 1928 the United States Congress passed a joint resolution designating May first as Child Health Day, and authorizing the President to issue a proclamation requesting national observance of the day. In 1929 the Conference of State and Provincial Health Authorities of North America appointed a May Day Committee. In 1932 this committee took over from the American Child Health Association, with the continuing assistance of that association, the responsibility for the annual observance of Child Health Day. In the states the work is under the direction of State Departments of Health.

Child Health Day celebrations are intended only to mark and emphasize either the inauguration or the culmination of year-round work for improvement of the health of children. The project for 1935 is diphtheria immunization. This was chosen because there has been but little reduction since 1930 in the number of deaths from diphtheria throughout the country. While particular emphasis will be laid on immunization this year, it is not intended that the project be limited to 1935. On the contrary one of the chief objectives is to have the work continued year after year by the medical profession.

IMMUNIZE NOW—Stamp Out Diphtheria, is the slogan. The measures proposed are:

To immunize all children between the ages of six months and six years.

To make early immunization a routine practice by all physicians.

The majority of pediatricians do immunize the babies under their care during the first year of life. Physicians in general practice also should follow this procedure.

State Departments of Health and the unofficial organizations interested in children are calling the attention of parents and communities to the need for early diphtheria immunization. Each individual physician should be prepared to take care of the applications for immunization. Cooperative plans for this work should be made by the local medical societies and departments of health in all communities. When a local medical society has perfected plans for this phase of preventive medicine, there is no reason why it would not be possible to assume gradually other types until eventually preventive medicine forms an important part of the practice of all physicians.

This project offers opportunity for many medical societies and many physicians to assume their rightful leadership in the preventive medical work of their communities.

THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION
DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

Office of Publication: 1021 Hume Mansur Bldg., Indianapolis.
Editor: E. M. SHANKLIN, M. D., 5141 Hohman Avenue, Hammond, Ind.
Managing Editor: THOMAS A. HENDRICKS, 1021 Hume Mansur Building, Indianapolis
Editorial Board:
F. T. ROMBERGER, M. D., Lafayette.
T. B. RICE, M. D., Indianapolis.
PIERCE MACKENZIE, M. D., Evansville.
L. P. HARSHMAN, M. D., Fort Wayne.
ERNEST RUPEL, M. D., Indianapolis.

MAY, 1935

EDITORIALS

MENINGOCOCCIC MENINGITIS

Epidemic meningitis has always struck terror into the heart of the layman and despair into the heart of the attending physician. Although at the present writing there are only about 175 cases in the United States, there is always the dread of an epidemic. Before the use of the meningococcus serum made by Simon Flexner in 1908, the mortality was about seventy-five per cent and since that time has been fifty per cent. Two recent articles published in *The Journal of the American Medical Association*[1] [2] give hope for greater reduction of this mortality.

In 1908 Flexner decided that there was not an exotoxin elaborated by the meningococcus and that the effects of the serum were antibacterial. Like an opinion of Aristotle's in the days of old, this was apparently accepted as law. A toxin was not looked for, or at least was not found until in 1931 when Ferry, Norton and Steele demonstrated soluble exotoxins. Ferry and Steele now have developed an antitoxin for clinical treatment of meningococcus meningitis and have shown that about fifty per cent of children between twelve and eighteen years are susceptible to the toxin of the meningococcus and further that those susceptible can be actively immunized against this toxin. This does not necessarily mean that it will confer immunity against the organism but such comparable conditions have resulted in the case of the toxins of other diseases.

At the same time we have the report on a series of 296 patients, with a diagnosis of epidemic meningitis, on the service of Dr. A. Hoyne at the Cook County Hospital of Chicago. Eighty-five received the meningococcus antitoxin and 211 were given standard brands of antimeningococcus serum. The mortality of the 85 was 23.5%; of the 211 it was 45.9% or a 50% reduction in the mortality. The treatments by antitoxin were given intravenously. This does not tell the true value of the antitoxin for the patients coming to the county hospital were in many instances in a moribund condition, being friendless or homeless pick-ups of the police ambulances.

In view of the promise of the already reported results, the commercial antitoxic serum[3] prepared from the polyvalent filtrates of the four Gordon groups of meningococcus after the method of Ferry, Norton and Steele has been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for a probationary period of one year.

Again we have a victory from the laboratory for experimental medicine and one more of the most dreaded diseases of mankind bids fair to go the way of diphtheria.

[1] Hoyne, A. L.: Meningococcic Meningitis, *J. A. M. A.* 104: 12 (March) 1935.

[2] Ferry, N. S.; Steele, A. H.: Active Immunization with Meningococcus Toxin, *J. A. M. A.* 104:12 (March) 1935.

[3] Meningococcus Antitoxin—Parke, Davis & Co., 10,000 units antitoxin.

MAY DAY AND MOTHER'S DAY

For a number of years the first day of May has been set aside as Child Health Day, and the corresponding week as Child Health Week. A little later in the month we have Mother's Day as a time for beautiful sentiments. It is a charming custom but sometimes it is little if anything more than an idle gesture by persons who like to titillate themselves. Probably there is little harm in titillation, and it does have the effect of keeping a lot of people busy who otherwise might be a nuisance, but, seriously, the subject of child and maternal welfare is much too important a matter to be passed off in such a manner. It is a program of major importance every day in the year. In Indiana, particularly, there is a heavy obligation resting upon the shoulders of the medical profession in view of the fact that the work of this sort as done by the former Board of Health has been discontinued, with the understanding that the profession would assume the responsibility of carrying on such activities in a way that will not meet with professional objections. Much has been done by the various medical societies, but there has been apparent a tendency to let down. This is a call to arms.

The slogan of the American Child Health Association for the current year is "IMMUNIZE NOW: Stamp Out Diphtheria." Now is the time to get parents interested in immunization. The memory of the winter with its many respiratory infections is fresh in the minds of the people. Children immunized now will really be ready for school next

fall, while if we wait until then it will be weeks or even months before the immunizing effect is obtained. It is being noted that there has been a very considerable falling off in the number of *school* children dying of diphtheria this year, but there has been little change in the number of pre-school children who have died of the disease. This is undoubtedly due to the fact that most of the children immunized in the campaign of a year ago were *school* children. It is the *pre-school* child who needs it most. It is very nice, indeed, to have healthy children dancing on the green in this festive season, but it is far more important to have healthy children all the year around. It would be unethical to *urge* parents to bring their children in during the next few months to have their various respiratory defects corrected, but doctors may be expected to have the welfare of their little patients at heart to such an extent that they may be pardoned for *suggesting* that the summer time affords a better opportunity than does the winter. Now is the time to get the children immunized and to have their nose and throat troubles corrected.

With regard to Mother's Day, much the same situation is observed. The doctor who conscientiously examines urines, takes blood pressures and makes prenatal examinations, who observes the best possible technique and asepsis, and who conscientiously makes his follow-up calls and examinations, is doing more for mothers than all the rabid observers of Mother's Day in the world. It is a pretty sentiment to wear a red or a white carnation on a day in May, but it is far more important to keep the red carnation from turning white—every day in the year. It is characteristic of those who most zealously observe the day that they paint a picture of a beautiful old lady with silver hair and folded hands. Splendid! Provided we do not forget—and certainly the medical profession is least guilty of forgetting—that the mothers who really count most are those who have golden hair and hands that have few chances to be folded. Mothers are not asking us for homage or reverence. They are asking us for help. They need us to help them with the biggest and most important job in the world—the job of making homes and rearing children.

It is all very well and, indeed, important that there be statistics concerning maternal welfare, and that there be case histories, and that there be propagandists running up and down whooping it up for a big program for maternal care; that there be sermons and eulogies, and that we wear a flower on Mother's Day. It is all very well, indeed! But the really important work for mothers and children is that done by physicians, nurses, and teachers of better ways of living; by husbands and fathers, and by the mothers themselves. The care and protection of mothers, children, fathers and homes is the most important task of the nation and of civilization.

DOG HAIR AND DYNAMITE

Claude B. McBride of Jeffersonville was perhaps the most colorful man in the Indiana senate last session, and whenever a bill came up for discussion which was distasteful to him, up he would rise to the full height of his six feet and more of senatorial glory and dignity, and state: "Gentlemen, this bill is all right, but it's full of dog hair and dynamite."

That is exactly the case in regard to the voluminous 743-page report of the Committee on the Study of Governmental Economy of the State of Indiana, from which future legislation will be drawn in an effort to cut the cost and increase the efficiency in local county and township governments. Few persons who have studied the situation do not freely admit that the present system of township and county government is too often inefficient, wasteful, and subject to downright fraud, but even a casual review of the report of the committee indicates that the part of the report which recommends the creation of an entirely new department in each county, to be called the Department of Public Welfare, is chock-full of dog hair and dynamite. The county health officer, the county hospitals and asylums, and the care of the indigent sick, all will come under the Department of Public Welfare.

The dog hair in this case was, we are convinced, generously supplied by none other than our old friend, Dr. R. Clyde White, Professor of Sociology and Director of the Bureau of Social Research of Indiana University. Dr. White has acted as executive secretary for the committee. The dynamite will be supplied when and if a law is enacted along these lines and the folks back home realize that many of the functions of their local government will be carried on by a bureaucracy as autocratic and arrogant as only a newly-hatched bunch of so-called trained social service workers and workerettes can be.

Now, don't get us wrong. The committee has done an admirably fine job, on the whole, and has painstakingly collected data and outlined definite principles which, if followed in drafting legislation, should save the taxpayers of the State of Indiana several millions annually, but the influence of Dr. White in attempting to turn our good old Hoosier state into a paradise for social service workers and hell for everyone else is a masterpiece in pansy politics. We do not believe that he ever will get away with it if the legislature comprehends the true picture which we will attempt to sketch here for you.

First, let it be known that although Dr. R. Clyde White is a Ph. D. and not an M. D., he has a yen for health matters and a yearning for the day when socialized medicine and some form of health insurance will come to the United States and to Indiana, despite the tragic results of mass medicine in vogue in Austria, Germany and Russia, where medical practice has become the football for

politicians. Under Dr. White's tutelage each year come many youngsters to take a training course and then enter social service work, and the new plan offered in the proposed new welfare set-up would provide fertile fields and innumerable jobs for his graduates in every county in Indiana.

Now comes the set-up itself. In the new department of public welfare will be centralized all services relative to public welfare and public health. At the present time the same services are spread out among the township trustees, the board of county commissioners, the clerk of the circuit court, and the local poor relief administrator under the direction of the Governor's Commission on Unemployment Relief.

A new county board of public welfare, consisting of seven persons appointed by the county council, is to be attached to this new welfare department, and this board will select and appoint a director *from a list of eligibles set up by the State Department of Public Welfare!* This means that the local public welfare board has absolutely no power or initiative in the selection of its own county director. It is limited in its selection to a man from the hand-picked list made out by some one in Indianapolis. What a "soft" set-up for "Dr." White and his social service workers! Gone is your local self-government. How easy to name only so-called trained social service workers as eligibles by the State Department of Public Welfare!

A situation would likely develop as it did in the case of the appointment of the director and several members of the State Transient Bureau staff in which case it was decided that no one in Indiana had the *training* for the job, and it "came to pass" that the director and several staff members who were selected for high places had some connection or came from the social service school in Chicago which had graduated the social service workerette who happened at that particular time to be the reigning "Madam Queen" in relief circles. At least, that was the current story, and what actually happened was that persons were brought from outside the state who had no intimate knowledge or understanding of Indiana and our local problems, and received jobs, when capable, experienced men and women in Indiana needed and could have filled those positions with credit. Of course, the effectiveness of the Transient Service Bureau under these high-powered, hand-picked gentlemen was seriously impaired before William Book and Wayne Coy, real Indianians, reorganized the service only in the nick-o'-time.

The same thing is not unlikely to happen (only multiplied as high as 92 times) if the recommendation of the report in regard to the appointment of a welfare director from a list of eligibles becomes a law.

That the members of this new cult of social service workers are far from shrinking violets when it comes to salaries is evidenced by the fact that according to the schedule of salaries contained in the report, the county director of public welfare will get more money than the recorder, the assessor, the sheriff, the county superintendent, the clerk, the prosecuting attorney—in fact, more than any elective county official with the exception of the circuit judge. It also is illuminating to see that the allowances for staff salaries, clerical assistants, office expenses, etc., for the welfare director's office, exceeds that allowed the head of any other department of the county government. It isn't difficult to visualize just what a morale builder-upper among the body politic the importation of these recent graduates, all freshly imbued with the social service patter, coming from the outside into one of the best paid jobs in the county, would *not* be.

But, when all is said and done, as we said before, we don't believe that Dr. White is going to get away with it. We believe that when the proposed bills for local government efficiency and economy are finally drawn up for the special or the next regular legislative session, the dog hair and dynamite will have been largely removed, and the control and leadership of the welfare and health situation in each county will rest not with some one whose principal qualification for the job is that he or she has a social service degree, but with some one who, by experience, knows the Indiana situation, one who has intelligence, tact, and judgment, and who is responsible to no social service clique in Indianapolis, but directly responsible to the citizens of the county which he is serving.

PURE FOODS AND DRUGS

A good many years ago, as the result of indefatigable effort on the part of Dr. Harvey Wiley (a Hoosier born in Jefferson County and educated at Hanover), there came into being what has since been known as the Federal Pure Food and Drug Act. The biography of Dr. Wiley makes clear the task that he had set himself when he sallied forth to battle for this almost priceless law. Once the law went into effect, Dr. Wiley found that his duties had only just begun, for the enforcement of the law was a task of no mean proportions. Manufacturers who had been putting out what purported to be strawberry jam which actually had no relation to the delectable fruit (in some instances timothy seed was used to imitate strawberry seeds), and others who were putting on the market various tomato products made from overripe vegetables with "color" and various preservatives added, all without regard for human health and happiness, found a tartar when they met the genial, but firm, Dr. Wiley. The name of Dr. Wiley became synonymous with pure foods and pure drugs.

As was to be expected, the law did not thoroughly cover the field; the situation was much like that described by our own Dr. Wishard who, in telling of writing the medical law of 1897, states

that he regretted he did not have the foresight to include many things that are much desired today. Gradually, after the passing of Dr. Wiley, the chiselers began their work, at first insidiously, now openly, until the present situation leaves much to be desired; we need a radically new set-up.

There are many reasons for this situation, chief among which seems to be the radio broadcasts. It is a peculiar quirk of the law that open newspaper advertising and radio broadcasts permit almost unlimited claims concerning the beneficences following the use of this or that nostrum. Tooth pastes, hitherto presumed to be used for the purpose of cleansing the teeth, have assumed miraculous powers of healing. The commonly used cigarette has come to be regarded as a health-promoting, if not health-giving thing, if one is to believe the radio broadcasts. (The fact should not be overlooked that a few years ago some 27,000 doctors were gullible enough to declare themselves in favor of a certain cigarette, principally because they were the recipients of free cartons!) A nationally advertised remedy for "female trouble"—whatever that may be—is said by the radio broadcaster to possess marvelous properties, while the label on the drugstore bottle contents itself with the naive statement: "Recommended as a vegetable tonic in conditions for which this preparation is intended." One might go on almost indefinitely relating similar instances where the label and the advertising claims of numerous products are at marked variance.

About a year ago, Dr. Royal S. Copeland, United States Senator from New York, introduced a bill that had more than a full set of teeth in it. Naturally, it met with a storm of opposition; our newspaper friends, sensing the havoc that such a law would create in their advertising revenue, made a studied and determined effort to create a public opposition to such a law; drug manufacturers, those who were engaged in the publicizing of nostrums, dentrifices and the various cosmetics of questionable repute, were strong allies in this campaign against the measure. Then, too, it had an added handicap in that the name of Professor Tugwell was prominently attached to the bill, and that gentleman was not so well favored in certain quarters. Thus it was not surprising that the proposed law came to an untimely end.

During the present session of the Congress a new bill has been introduced by Dr. Copeland; a bill perhaps less stringent in character, but nevertheless a bill of exceeding merit; fortunately, since certain provisions have been removed from the bill, it seems to be well favored. Among other things it provides that all packages of foods, drugs, and cosmetics shall bear the names of the active ingredients; this alone would be a great improvement in the present situation. Later along in the bill comes the statement, "any representation concerning any effect of a drug shall be deemed to be false under this paragraph if such representation is not sustained by demonstrable scientific facts or substantial and reliable medical opinion." Would that those two fightin' Hoosiers, Drs. Wiley and Hurty, might be able to read that statement! Then the bill goes on to declare against the advertising of any drug which represents it to have any therapeutic effect on such diseases as Bright's disease, cancer, poliomyelitis, etc.

President Roosevelt has openly given his support to the proposed law; among other statements he is said to have declared that "No honest enterpriser need fear that because of such a measure he will be unfairly treated. . . . Present legislation ought to be directed primarily toward a small majority of evaders and chiselers. . . . It will, besides, provide a bulwark of consumer confidence throughout the business."

The bill has been reported out of committee, favorably, and is now in process of discussion before Congress. Though the time is rather late, a communication to your representatives in Congress will do much to bring about the enactment of this very much needed bit of legislation.

EDITORIAL NOTES

INDIANA physicians will have no excuse for not being right up-to-the-minute in things medical after May, 1935. Postgraduate work available in May will enable any physician to refresh his memory and to learn latest methods. Turn to the postgraduate programs now, and make your plans to attend as many sessions as possible.

ANNOUNCEMENT is made of the forthcoming sixth Pan-American Medical Association meeting, July 18 to August 28, this time taking the form of a "floating congress" to Brazil. The S. S. Columbia, said to be the largest liner ever to cruise to South America, has been chartered for the trip, during which many ports will be visited, giving ample opportunity for frequent shore excursions. Dr. Joseph J. Eller, 745 Fifth Avenue, New York City, is director general of the expedition.

THE Fort Wayne *News-Sentinel* recently carried an interview with a local physician concerning the smoke menace in our cities; the statements of the speaker, a physician-member of the local Board of Health, are cleverly made and contain much meat. The thing that strikes us, however, is the fact that the name of the doctor does not appear in the article. We dare say that the omission of the name in no wise detracted from the interest of the reader of the article, which bears out the contention of our Publicity Committee that names are not essential in such matters.

THE official call to officers, fellows and members of the American Medical Association has been sent out for the eighty-sixth annual session of the Association to be held in Atlantic City, New Jersey, June tenth to June fourteenth. The House of Delegates will convene on Monday, June tenth. The scientific assembly of the Association will open with the general meeting on Tuesday, June eleventh, at 8:30 p. m. The various sections of the scientific assembly will meet Wednesday, June twelfth, at 9 a. m. and at 2 p. m., and subsequently according to their respective programs.

A RECENT number of the *Annals of Medical History* carries the rather disturbing information that, unless financial clouds are lifted, it is probable that this most excellent periodical will have to cease publication. The *Annals*, published by Paul B. Hoeber, Inc., carries no advertising and necessarily depends upon subscriptions for maintenance. It has the distinction of being a child of Sir William Osler; its present publishers have taken great pride in producing a magazine of more than common worth and beauty. By all means, its continuance should be assured, and it is hoped that the various state associations will take the necessary steps to assure this. Members who are interested are urged to subscribe.

THE Indiana Division of Public Health has received a request for copies of the brochure on the treatment of gonorrhea and syphilis from the secretary of the Social Hygiene Committee of the New York Tuberculosis and Health Association, Inc. As adequate medical treatment for the infectious venereal disease patient is about the best protective measure from a public health standpoint that can be safely carried out, this brochure was prepared by the Indiana Division of Public Health and a committee appointed by the president of the Indiana State Medical Association, with the end in view that it might be of help to the general practitioners in the State of Indiana in the treatment of gonorrhea and syphilis. If you do not have a copy, send for one; it is yours for the asking.

"IMMUNIZE NOW" was the May Day motto selected by our Bureau of Publicity for its release of April fifteenth. As you probably know, these releases are sent to a very large group of newspapers over the state, most of which print them weekly. The bulletin calls attention to the decrease in the incidence of diphtheria, following some 200,000 immunizations during the past year. Diphtheria is a wholly unnecessary disease; there is no good reason why it should not be as rare as is typhoid fever; immunization is a harmless procedure; it is not expensive; it works little or no hardship on the kiddies; it is effective. All of these are very good reasons why every Hoosier child should be immunized against what in former years was a veritable scourge in some localities.

POSTGRADUATE MONTH

In Indiana, May is the postgraduate month. This year there is a wealth of study material offered to the physician who is interested in keeping abreast of the times. Ten of the thirteen councilor districts will hold district meetings, each one a small postgraduate course for the physicians in the district. The Indiana State Medical Association in conjunction with the First District will present its annual postgraduate program at Evansville, May eighth. The Indiana University School of Medicine this year is offering an unusually interesting and complete postgraduate program, and there will be no registration fee for Indiana physicians. Programs are detailed in this issue of THE JOURNAL on pages 248, 249, and 250.

Postgraduate education is an essential for the progressive physician. We honestly believe that in no other state are physicians given opportunities such as outlined in the above-mentioned pages, and at such small expense.

Be wise—and register early!

EITHER physicians do not read the many warnings we have printed in THE JOURNAL regarding unsound investments, especially those of the "wild cat" type, or, if they do read them, they certainly pay no attention to the advice given. This is again brought to mind by a notice in a recent number of the *Bulletin* of the Indianapolis Better Business Bureau regarding the closing of the Morley Bucket Shop, which has been operated in Indiana for several years past. We are advised that many of our members were caught in this trap, some of them losing considerable money. Just why medical men, who are supposed to be exceptionally well educated, should fall for this line of racketeering is beyond us; surely they have plenty of warning. We again quote the slogan of the Indianapolis Bureau—"Before You Invest, Investigate!"

HON. FRED M. VINSON, member of Congress from Kentucky, paid Dr. A. T. McCormick a merited compliment when he had printed, under Extension of Remarks in the *Congressional Record*, the speech delivered by Dr. McCormick before the Kentucky Medical Association at Louisville, March 3, 1935. Dr. McCormick had gone to Washington to participate in the hearings before the Ways and Means Committee of the House, in the matter of social security legislation, the general principles of which were introduced by a special message from the President. In presenting his report to his State Medical Association, Dr. McCormick gave a detailed story of the goings-on during these hearings.

Seldom, indeed, does a medical man have entree to the *Congressional Record* and we compliment Dr. McCormick on the manner in which he availed himself of the opportunity.

IT HAS been called to our attention that a physician working in a charity hospital in Indiana is laboring under the impression that, because of his connection with the hospital, he cannot charge regular fees for patients outside the hospital who consult him. As a result, patients who are not at all to be classed as indigent consult him and pay only charity fees. Perhaps the physician, as sometimes is the case, is working under a misapprehension. However, he should make inquiry from fellow physicians in his community. The practice is bound to work an unjustified hardship upon his confreres.

IT MAY be true that "there is nothing new under the sun," but occasionally we note something that is at least unusual. This time it is in connection with the Internal Revenue department, whose agents have brought suit against an Indiana physician, alleging that he is indebted for income taxes on an earned income of rather sizable proportions for the year of 1931. The matter is complicated by the fact that this physician was adjudged bankrupt in the same year and his attorneys set forth this fact in their defense of the claim. The attorneys claim that a judicial sale was made when the physician turned over to the government his entire assets, and the government maintains that no such sale was made, under the circumstances. The ruling of the federal judge who has the matter under advisement will be awaited with interest.

WE HAVE a letter from a down-state member complaining of the manner in which a fellow practitioner had criticized the management of a case, which seemed destined to lead to a suit for malpractice. It would seem that by this time physicians would have learned to be a bit careful in their comment on the work of the other fellow, since so much has been said on the subject in the past few years. While we believe there is a present lull in the filing of such suits, the fact remains that care should be observed when discussing cases that have been in other hands. There are a few Indiana physicians who seem to take a special sort of delight in making adverse comments in such matters, some who seem unduly pleased when a confrere has a bit of tough luck in his handling of a case. If for a period of perhaps six months every Indiana physician would keep his own counsel in such affairs, malpractice suits would become unknown in our state. Let's be more careful as to what we say about the other fellow; lots of us continue to reside in houses of glass.

SOME of our Indiana oculists have recently received a *postal card* from an optometrist in one of our central cities bearing the announcement that a chain store optical outfit is seeking the services of physicians "to do refraction work only," this service to be rendered in some of the larger cities in Indiana. It is further announced that there is a salary of $35 per week, together with a commission proposition. How any man, with even a mediocre medical education, could lend himself to such a commercial proposition is quite beyond us, particularly when the solicitation is made via the cheap postal card. However, we have not forgotten that in the prosperous times of the late twenties we met with several instances where medical licensees of "this sovereign state" were lending their presence to and hanging their county permits in the offices of various "Men's Medical Specialists," and this for as little remuneration as fifteen dollars per week.

ACCORDING to one of our exchanges, the eleven ages of man, expressed in menu style, run about like this:

1. Milk.
2. Milk and bread.
3. Milk, eggs, bread and spinach.
4. Oatmeal, bread and butter, green apples and all-day suckers.
5. Ice cream soda and hot dogs.
6. Minute steak, fried potatoes, coffee and apple pie.
7. Bouillon, roast duck, scalloped potatoes, creamed broccoli, fruit salad, divinity fudge and a demi-tasse.
8. *Paté de foie gras*, wiener schnitzel, potatoes Parisienne, egg plant *à l'opera*, demi-tasse, Roquefort cheese.
9. Two soft-boiled eggs, toast and milk.
10. Crackers and milk.
11. Milk.

FIVE BILLION DOLLARS is the estimated annual expenditure in the United States for lotteries, sweepstakes, etc., this sum being sent out of the United States to those countries which seem to countenance such games of chance. Judging from the number of physicians we personally know who are interested in various schemes to "improve the breed of race horses," it is safe to assume that many of our folks contribute some portion to the amount above named. According to a recent bulletin of the Indianapolis Better Business Bureau, many of these tickets on horse races in foreign countries are forgeries, while countless scores of others are printed for sales purposes only and the buyers thereof have absolutely no chance to win. The moral is that if you wish to invest in such

games of chance, it would be well to see to it that your "investment" has at least a gambler's chance.

WHETHER it be due to the present state of economic affairs or to some other cause, it is a fact that there is a decided increase in the number of would-be healers, folks who for one reason or another seem to believe that they are especially called upon to enter into the business of relieving various and sundry bodily ills and ailments. From time to time we have commented on some "applications" received by the Indiana State Board of Medical Registration and Examination. Now comes another, with variations. One man made inquiry through the office of the United States Surgeon General in Washington, D. C., and his request was referred to the State Board. Writing from Gary, the inquirer asked the Surgeon-General what steps he should take to be licensed to practice "Bio-Psychology Massage Treatments" in Indiana. We often wonder from what sources come all the new-fangled terms that seem to be so readily coined by these cultists.

A SHORT time ago a local health officer called us to inquire regarding the acknowledgment of certificates of health from a locally registered chiropractor. It seems that the law in this case states that such examinations shall be made by a "reputable, licensed, practicing physician." We suggested that in our opinion certificates from other than practitioners of medicine should not be accepted, but that the matter should be referred to the State Division of Public Health, and that was done. Now comes the information that Director Verne K. Harvey has upheld the local health officer in the matter, stating that such certificates from chiropractors should not be officially recognized. This step is one of what we trust will be many in the correction of some of the glaring errors in connection with health matters in Indiana. For years past we have had "health officers" who were in no manner related to the medical profession and who had no training in hygiene, sanitation, or anything of the sort. A recent law provides that physicians only shall serve in such capacities; surely it is a law that has been long and sorely needed.

THE Elkhart *Truth* in its April first issue prints an editorial on "American Medicine" which shows an unusually intimate knowledge of medical affairs. The editor quotes a Chilean physician, Dr. Arturo Scroggie, who recently concluded a tour of inspection of American medical centers. The physician declared that it no longer is necessary for American physicians to go abroad for postgraduate study, for our home institutions offer much better facilities. He attributed this in part to the fact that in Germany the political situation had much to do with her loss of prestige in medicine; he also commented on the fact that the ban on Jewish physicians at hospitals and universities played no small part in this great change. Another point he stressed, and one that appeals very strongly to us, is that "less emphasis be placed on laboratory work and more on observation of the patient." Further, he commented on the fact that even in times of financial stress, when the medical income reached such low levels, our scientific advancement did not slacken. We do not know how much time Dr. Scroggie spent in the United States, but it is apparent that this time was well spent in an intimate study of our medical affairs.

THE A. M. A. Council on Pharmacy and Chemistry recently celebrated its thirtieth year of service to the medical profession, an accomplishment of no mean proportions, when one considers the invaluable services rendered. Prior to its inception, the marketing of drugs was a more or less promiscuous sort of thing; there were few restrictions; the Federal Food and Drug Act had not begun to function; therapy was quite dependent upon the ethical standing of the manufacturers. The various publications of the Council are accepted as gospel over the entire world and a non-accepted preparation is generally looked upon with more than a slight suspicion. We cannot pass the subject without tribute to Dr. W. A. Puckner, for many years the secretary of the Council and its most active member. The work of Dr. Puckner will long live in the annals of medicine. One interesting feature of the work of the Council lies in advertising in our medical journals. From its founding, *The Journal of the Indiana State Medical Association* has refused to carry advertisements of non-Council-accepted products. This is generally true of our state journals; the only exception, we believe, is *The Illinois Medical Journal.*

ONE of the largest of American industries, one in which we all have a direct interest, and one which has had a rather hard time of it during these lean years, is now faced with Congressional legislation that would seem to add to its many burdens. We refer to the railroads. At the present time they are concerned with at least three proposed laws which, if enacted by Congress, would add the sizable sum of six million dollars to their operating costs, at a time when railroad income is the lowest in the memory of most of us. These measures have to do with train operations, further limiting of working hours, providing for increased size of crews and fixing a limit as to the number of cars hauled per train. As physicians, we are vitally interested in these proposals, as indeed should every citizen be

interested. Those of us who happen to hold railway stocks, hoping that in time to come they may approach a normal value, are especially concerned. On the other hand, we are all concerned because an added cost of operation, sooner or later, comes from the pockets of our citizens. It is hoped that due consideration will be given these matters and that legislation which will further harass one of our most prominent and most necessary industries will be of the negligible quantity.

IN THE JOURNAL for April there was printed a group of resolutions recently adopted by the Indiana Roentgen Society concerning a proposed general tuberculosis survey in Indiana. The committee which formulated these resolutions seemingly struck at the heart of the situation when it said that such a survey contemplated a "mass production method rather than the more scientific examination made by competent physicians and qualified roentgenologists." Again, they make the patent observation that a negative report of today may be necessarily followed by a positive finding a few months later, once the first report may give rise to a sense of false security. The committee, as a substitute for the proposed plan, recommends that at the beginning of the school year each child be checked by the family physician and that after a positive Mantoux test the child be subjected to a very thorough examination. The resolution opposes "short cuts," as would seem to be the case if "mass production" methods are employed and insists that transparent films, only, be used in all examinations. We are inclined to be in thorough accord with these resolutions; in fact, we have long held the opinion that in all "wholesale" examinations there is quite apt to be a justifiable complaint of slip-shod examinations.

ONE of the younger group of columnists whose "stuff" is more than commonly good is Albert J. Beveridge, Jr., of Indianapolis. Writing in the Lebanon *Reporter* he recently commented on some phases of radio advertising, paying his compliments to those announcers who boost various patent medicines and cosmetics. Among the varied and interesting statements made by this writer, one especially appeals to us: "If any one has the patience to listen to a radio program for an hour or so, especially in the day time, he will rapidly become convinced that everyone in the United States is suffering from either lumbago, rheumatism, poor kidneys, a bad liver, heartburn, headaches, dry scalp, coughs, colds, or indigestion. Somehow or other the American stomach is an amazingly vulnerable part of the body. At least, radio advertisers from one end of the nation to the other would like you to believe that this is so." And again, he says, "The great misfortune about the whole thing is that so many people are wooed into buying these cures by suave crooners, jazzy bands, or stirring melodramas. And there is always that announcer with an affected, arrogant voice. The radio is certainly having its effect upon the American people. The present form of propaganda that pours through the air is fast becoming nauseating to the majority." We agree with Mr. Beveridge in his wish that the probability of the Federal government taking steps to limit, in some way, these patently fraudulent pronouncements, may become a reality, and that soon.

AT THE last session of the Indiana legislature the hydrophobia law which has been on the statute books for many years was repealed. This means that the state is going out of the business of treating rabies. At the time the law was first passed, it was a good one, because at that time rabies could be treated only at a Pasteur laboratory. Now, however, the virus can be obtained and given by any physician who knows how to use a hypodermic syringe. Indigent persons needing free rabies treatment still can get it by taking advantage of the same law by which diphtheria, tetanus, and scarlet fever antitoxin can be obtained, but the treatment will no longer be given by the Division of Public Health. In the next issue of THE JOURNAL, there will be an article giving complete directions as to the technique of giving the treatment. We hope that every physician will thoroughly familiarize himself with the procedure and that good results may be obtained. In the event that there should be an increase of deaths from rabies under the new law, it is not unlikely that there would be agitation for the repealed law to be re-enacted. The success of the present arrangement will depend entirely upon the understanding and energy of the physicians who are entrusted with the responsibility for the treatment of this important disease. It is of interest to know that statistics indicate that the disease is more prevalent in certain parts of Indiana, particularly Marion County and the southwestern quadrant of the state.

THE New York *Times* for March 24, 1935, tells of experiments on the comparative values of methods of immunization against typhoid as reported in the Moscow *Journal of Epidemiology and Microbiology*. Instead of the ordinary method of vaccination by inoculation the author, Besredka, gives two pills within a half hour of each other on an empty stomach. The first pill contains dried bile and the second about 40,000,000 dried typhoid bacilli. The Soviet health authorities have tested methods by giving 28,000 persons the standard inoculations, and 56,000 were given the pills according to Besredka's method. Twenty-five thousand were used as controls. At the same time,

200,000 persons afflicted with typhoid were studied. The test was conducted over a period of two years. The results from the Russian study would seem to show that the inoculation method was about twice as efficient as the method by ingesting capsules. The opinion gained from this study was that the period of immunity with any method used was only about six months. However, in Besredka's book "Local Immunization" based on experiments in Rumania and France, he concludes that the oral method is superior to inoculation. He believes that the continued use of oral immunization is justifiable. The Soviet authorities, even though the statistical reports are confusing, are continuing to use the oral method because of the ease in giving the pills.

NEW county medical society bulletins have made their appearance in various parts of the United States, some in Indiana. With the exception of a few pages, they are all alike. They are rather pretentious sheets, carrying about thirty-six pages, with a generous amount of advertising, much of which is foreign to our state. The bulletins seem to be a commercial proposition; they are published by an out-state concern, and the greater portion of the reading material also comes from outside the state. It reminds us very strongly of the fillers used in country newspapers, and we do not mean to infer that the material is without value, but that it simply is in no sense local, and can only be regarded as filler. It is to be regretted that these highly commercialized county society bulletins have made their appearance in Indiana. There is little of the personal element in them, and there is little that they can accomplish. It is simply another "split" for advertisers to make in their set appropriations, meaning that there will be a little less appropriated to present established magazines. Medical journals are dependent upon their advertising patronage. THE JOURNAL could not carry on if it had to rely wholly upon the annual subscription allotment of two dollars per member. THE JOURNAL is *your* journal, and we believe that it serves a mighty important assignment in the medical affairs of Indiana. We believe that we have the right to the fullest support from component medical societies, and we also believe that full measure of support is not rendered by those county societies who use commercialized bulletins.

THERE has been some comment in our capital city regarding an outlet for papers by Indianapolis physicians. An official of the local society is quoted as having recommended the establishment of a new medical journal there, and sets this forth as one of his chief reasons. We have made a check of papers rejected by THE JOURNAL, and find that in twenty-nine months the total is an even dozen; of this number two were from without the state, and eight were submitted by Indianapolis physicians. Of this latter group, five were rejected by unanimous vote of the Editorial Board, one was returned for the reason that it was not appropriate for a general journal, one was rejected because it treated of a non-medical subject and the author ignored requests that it be rewritten, and in one instance the author had had one paper published during the current year and, under the rules of the Editorial Board, was not eligible for a second. The rule which limits a member to one appearance in THE JOURNAL in any one year was made by the Board after a careful study of the matter. In years past there had been much criticism because men from certain parts of the state seemed to be favored. We have earnestly attempted to make this claim invalid, and while it is manifestly impossible for an Editorial Board always to please a membership of three thousand, yet we feel that we have done a pretty fair job of trying to do that very thing. It is observed that more men are writing papers than ever before, perhaps because there has been more leisure time in which to do it. Every effort is being made to accommodate all acceptable material offered; under the law of averages, some of it cannot be used.

INDIANA, and particularly Indianapolis, frequently is visited by one "Dr." R. A. Richardson who calls himself a "renowned international lecturer, author and teacher" and works through churches or religious organizations such as the Y.W.C.A. (where his "assistant" worked recently in Indianapolis). His scheme is to give lectures (and take up a collection) and then form "classes" for which he charges. He also has sold books and magazines. It is needless to say that R. A. Richardson is not a graduate of any reputable medical school. His career has been varied, and according to Kansas City, Missouri, telephone directories has included both optometry and osteopathy, and in some of his early newspaper advertising he was described as an inventor and a surgeon. A few years ago he worked the food-fad racket, purporting to teach people how to eat. However, his main racket now seems to be in the pornographic field, lecturing on such subjects as "Love, Marriage, Money and Divorce," and "The Sexual Problems of Life." In June, 1934, R. A. Richardson was advertising in San Francisco, to the effect that he would give lectures for "women only" on such subjects as "What Men Admire Most in Women," "Why Few Women Are Happy," and "What Every Woman Should Know." On June 29, "Dr." Richardson was taken into custody and booked at the San Francisco city prison, where he was released on bail, and later was sentenced to ten days in the county jail, which sentence was suspended on condition that he no further violate the terms of the

medical practice act, and particularly that he should not use the prefix "Dr." or any other statement to indicate that he was a physician while in the State of California. It seems too bad that there really is no effective way to warn a gullible public against such enterprising self-styled "doctors." Sooner or later, however, they usually run afoul of the law.

REPRESENTATIVES of a P.-T. A. group recently appeared before the Hammond Medical Society, to ask for the cooperation of the local physicians in a pre-school check-up. The spokeswoman is said to have demanded, rather than requested, that the physicians do the work free of charge, and intimated that dire consequences might ensue if the physicians failed to meet the demand. One of the officials of the Hammond Medical Society prepared the following statement:

Comes now the open season for ye good old "chiseling," or is there ever a closed season so far as making the medical profession the "chiselee" is concerned? Not new perhaps, but considerably irksome are the "demands" now being made by local Parent-Teacher Associations relative to the free examinations of pre-school children. Recently we have been told emphatically that the medical profession is "on the spot" and that if we do not cooperate in the matter of furnishing free examinations to pre-school children, dire consequences are likely to be our lot in the hastening of the socialization of medicine. To bolster the righteousness of these demands we are told that this movement constitutes a community problem, and that as such the physician must do his part in furnishing free services, just as the clergy must minister to community needs without thought of remuneration. Truly the humanitarian cloak is becoming a bit frayed with all the hypocrisy it is asked to shield. No one can doubt the value of these examinations insofar as the discovery of organic disease, physical defects, and preventable disorders in many of these children is concerned; certainly we are in accord with the motives which prompt this procedure if they are the correction of these defects, whenever possible, in order to secure for the afflicted child a better insurance of life and health. The medical profession has always stood ready and willing to give freely of its services in any emergency, and will continue to do so. It has done more than its share in caring for the indigent and the unemployed without compensation; it has carried the burden of considerable financial loss, not only because of those who have been unable to pay for their services, but also for those who have been able but unwilling to meet their just obligations for medical care. In addition the medical profession has continued to meet its full share of responsibility in all community chests, welfare, and various charity drives. We do not consider the physical examination of pre-school children as an emergency. We do grant that it is a community problem and that, as such, the expenses for it should be borne by the community, and not by any selected profession or members thereof competent to carry it out. The anvil chorus has become the cacophony of the "chiseler." Some day enough may prove too much.

ONCE more Dr. Maynard Austin of Anderson has sent the members of his society a monthly meeting announcement with a bit of his humor added for interest. Read the following suggestions from Dr. Austin for the greatest success under any form of state medicine:

1. Employ a tactful solicitor to extoll your ability. A profitable side line for a blonde doing house to house canvassing.
2. Hospitalize every illness possible. Two or three weeks' vacation with free board, room and bath will add to your popularity.
3. Magnify every indisposition. All sore throats are either diphtheria or malignant streps. All belly aches, probable appendix or gall stones.
4. Never mention gonorrhea. It's too common. Rarely some one might resent being thought common.
5. Take no chances with a pyorrhoea. It might be Vincent's. Shoot them with arsphenamine for a week or two.
6. Send all your surgery to the fellow who gives you the biggest commission.
7. The Lord made a mistake when he gave us tonsils. Do all you can to correct this failure. You can also get an anesthetic fee out of it.
8. When you have a late visitor in your office, if it is a lady and you wish to take her home, have her call the relief bureau for your services. When they call you, you can take her home and charge for a night visit.
9. Increase your reputation by stressing the seriousness of every illness. When a speedy recovery takes place you will get the credit for it.
10. The more laboratory and x-ray work you have done, the more interest you make your patients think you are showing them.
11. Having done away with both bootlegging and prohibition, the next great step towards ultimate freedom of responsibility is to do away with undesired pregnancies. Anticipating this will make you many friends.
12. Boost the Townsend Plan. Join the HOOY Long "Share Your Wealth Society." Make friends with all the politicians on both sides.
13. Always remember that Medical Ethics, like the Ten Commandments and the Constitution of the United States, are subject to the transitions of Economic Necessity.

THE PRESIDENT'S PAGE

Last month I mentioned the fact that there had, during the last quarter of a century, slowly developed an estrangement between our profession and the general public. Certainly this loss of prestige is one of the fundamental causes of the present social and political unfair discrimination against the medical profession.

Fifty years ago the practice of medicine was largely empirical in contrast to the rational or scientific practice of today, and yet, at that time, the lay-folk in each community looked upon the doctor as one whom they could lean upon for help and advice above all else—not only in ill health, hygiene and sanitation, but for social and sometimes political guidance. Many old people of today will tell you that their old family doctor of early days knew just about everything. In other words, he was the guiding star of human intelligence in the community.

Now, how did he arrive at this exalted position? Was it an accident? Or was it thrust upon him? Neither. His position was well-earned. Has human nature changed? Not at all. But social environment has changed very much for most of us. Fundamental education has become more general. Proud and selfish inherent instincts of man have found an opportunity for expression of ethical justice and unethical injustice. That part of human society which has been dominated by unethical impulses has seemed to outdistance that of the ethical class, partly because the unethical abhor restraint and openly defy all rules of ethics and justice, and through militant aggression envelope and dominate a large, vulnerable class, which represents the "in-betweens." Sophistry has replaced much of our simple and fundamental ideals.

From our standpoint as medical men the unethical and vulnerable classes, the latter of which is a victim largely through ignorance, have together formed the fundamental basis whereby the medical profession has lost much of its old-time prestige and power. Through and by these classes have been evolved all kinds of cults, quacks, quackish remedies and illogical and unjust social theories and practices, all of which are diametrically opposed to the high ideals of the medical profession. Many torch-bearers of quackish and cultish heraldry are today well-educated and of keen mind, which make them very dangerous instruments within a gullible public, always having for their goal financial or other gainful achievements. Their fields of endeavor today are of immense proportions.

In the days of our forefathers, a man undertook the study and practice of medicine because he had a love in his soul for humankind, along with proper mental and physical fitness, often not with great educational attainment, as he would have to possess today, but more often because of an inherent philosophical and analytical trend of mind, often a "diamond in the rough," so to speak, and, with a keen sense of observation as to cause and effect of various phenomena, analyzing his failures and successes, discarding the unreliable and storing the elect in his mental armamentarium. His hours of rest were measured by his hours of sleep. He spent little time with cards and none with golf. His faithful nag and rough roads gave him plenty of exercise and consumed much of his time. But he knew, as well as we, that rest and recreation sharpen the wits and tone the physique for greater accomplishments. As he grew into his patronage, he also grew into a mental attitude, which expressed itself in sincere friendship and genuine sympathy and esteem for all who sought his services. And by his works, he proved his fidelity to his trust, thereby earning the sincere confidence and sacred trustworthiness of his clientele, all of which clearly distinguished the difference between the practice of medicine and merchandising. Furthermore, the general demeanor of the old family doctor suggested dignity, culture and capability. Indeed, he was both humble and dignified—rather a difficult combination. In short, the doctors became the chain-threads in the fabric of human society. Today, in face of threats of regimentation by representatives of the general public, it seems that the chain-threads have greatly weakened. The remedy? An accurate knowledge of the direct and contributory causes of our much-reduced prestige should help much in an honest effort to recover the thing so dear to us.

Let us assume that a doctor or group of doctors have, in rare instances, exceeded the bounds of discretion in their charges. All fair-minded people very well know that thousands of other doctors have yielded much of their legitimate earnings to sacrificial altars with charitable grace, and certainly no judicious public can incriminate the profession as a whole.

For us to correct and live down an erroneous opinion when well established must entail long and arduous efforts. Plato, twenty-three hundred years ago, stated that to regain lost power or position necessitates many-fold more than a just sacrifice.

It is each doctor's duty. Let's go—with a full realization that the cure will be more difficult than would have been the prevention of this evil.



FOURTH ANNUAL GRADUATE EDUCATIONAL MEETING INDIANA STATE MEDICAL ASSOCIATION

JOINT MEETING WITH THE FIRST DISTRICT MEDICAL SOCIETY

ELKS' HOME, EVANSVILLE, INDIANA

WEDNESDAY, MAY 8, 1935, 9:00 A. M. (CENTRAL STANDARD TIME)

Morning

9:00 a. m.—

Opening remarks by C. J. Clark, M. D., Indianapolis, chairman, Committee on Graduate Education.

Introduction of Walter Leach, M. D., New Albany, president, Indiana State Medical Association.

Introduction of Keith T. Meyer, M. D., Evansville, chairman, local arrangements committee.

Introduction of W. E. Jenkinson, M. D., Mount Vernon, president, First District Medical Society.

9:15 to 9:45 a. m.—

"New Developments in Vitamins," R. N. Harger, Ph.D., Indiana University School of Medicine, Indianapolis.

9:45 to 10:15 a. m.—

"Obstetrics in the Home," E. O. Asher, M. D., New Augusta.

10:15 to 10:45 a. m.—

"Newer Methods in Diagnosis and Treatment of Pulmonary Tuberculosis," Paul D. Crimm, M. D., Evansville.

10:45 to 11:00 a. m.—Questions.

11:00 to 11:30 a. m.—

"Diagnosis and Surgical Management of Gall Bladder Disease," E. E. Padgett, M. D., Indianapolis.

11:30 to 12 m.—

"The Role of the Clinical Pathologist as a Consultant to the General Practitioner," Clyde G. Culbertson, M. D., Indianapolis.

12 to 12:15 p. m.—Questions.

State Committee on Graduate Education

C. J. Clark, M. D., chairman, Indianapolis

B. G. Keeney, M. D., Shelbyville

Keith T. Meyer, M. D., Evansville

Robert Moore, M. D., Indianapolis

W. L. Portteus, M. D., Franklin

Walter H. Baker, M. D., South Bend

M. J. Barry, M. D., Indianapolis

Walter J. Leach, M. D., New Albany, president, Indiana State Medical Association, ex officio member.

W. D. Gatch, M. D., Indianapolis, Dean, Indiana University School of Medicine, ex officio member.

Local Committee on Graduate Education

Keith T. Meyer, M. D., Chair.

William E. Barnes, M. D.

D. V. McClary, M. D.

P. E. Yunker, M. D.

Charles F. Willis, M. D.

Officers of the First District Medical Society

W. E. Jenkinson, M. D., President, Mt. Vernon

Minor Miller, M. D., Vice-President, Evansville

Kieth T. Meyer, M. D., Secretary-Treasurer, Evansville

I. C. Barclay, M.D., Councilor, Evansville

ROUTES TO EVANSVILLE PAGE XX

Noon

12:15 p. m.—

Lunch, business meeting and election of officers of the First District Medical Society. All who attend the meeting are invited to this lunch.

Afternoon

1:30 to 2:00 p. m.—

"Female Sex Hormones," Maurice V. Kahler, M. D., Indianapolis.

2:00 to 2:30 p. m.—

"Diseases of the Colon," B. S. Cornell, M. D., Fort Wayne.

2:30 to 3:00 p. m.—

"Emergency Surgical Treatment," N. K. Forster, M. D., Hammond.

3:00 to 3:30 p. m.—

"Diabetes," John H. Warvel, M. D., Indianapolis.

3:30 to 4:00 p. m.—Questions.

4:00 to 5:30 p. m.—

Clinical Pathological Conference. (Case presentations with frank discussion. Open to all.) William S. Ehrich, M. D., Evansville; C. R. Buikstra, M. D., Evansville; A. F. Muelchi, M. D., Evansville.

Evening

6:30 p. m.—

"The Medical Economic Picture Up-to-Date," R. L. Sensenich, M. D., South Bend, president-elect, Indiana State Medical Association.

"Common Sense in the Care of Children," Louis Segar, M. D., Indianapolis.

MOVING PICTURES

The Mead Johnson Company will present two films continuously during the day:

"Physiology of Fertilization in the Human Female."
"Allergy."

REGISTRATION FEE $2.50. THIS INCLUDES THE EVENING DINNER CHARGE

INDIANA UNIVERSITY SCHOOL OF MEDICINE ANNUAL INTENSIVE POSTGRADUATE COURSE

May 20 to June 1, 1935

PROGRAM

A. M.	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			CLINICS			
8 to 11 a. m.	Registration Medicine	Surgery	Gynecology	Medicine	Surgery	Gynecology
	Genitourinary	Pediatrics	Cardiovascular-renal	Gastrointestinal	Pediatrics	Cardiovascular-renal
	Obstetrics	Eye, ear, nose, throat	Dermatology	Obstetrics	Eye, ear, nose, throat	Dermatology
	Gastroenterology	Mental-Nervous	Pathology	Gastroenterology	Mental-Nervous	Pathology
	Ophthalmology	Medicine	Orthopedics	Ophthalmology	Medicine	Orthopedics
11:00 to 12:00			APHORISMS			
	Pathology Physiology	Medicine	Surgery	Therapeutics	Orthopedics	Obstetrics Pediatrics
P. M.			DIDACTIC DISCUSSIONS			
1:30-1:55	Medicine	Pediatrics	Medicine	Medicine	Pediatrics	
2:00-2:25	Medicine	Pediatrics	Medicine	Medicine	Medicine	
2:30-2:55	Cardiovascular-renal	Surgery	Surgery	Surgery	Surgery	
3:00-3:25	Obstetrics	Obstetrics	Cardiovascular-renal	Genitourinary	Surgery	
3:30-3:55	Surgery	Obstetrics	Cardiovascular-renal	Ophthalmology Otolaryngology	Medicine	
4:05-5:30	Clinicopathological conferences	Questions and answers	Clinicopathological conferences	Questions and answers	Clinicopathological conferences	
			OUT OF STATE SPEAKERS			
Evenings	Walter L. Bierring, Des Moines, Ia.	T. G. Orr, Kansas City	A. K. Barnes, Rochester	Preston Kyes, Chicago	(To be added)	

NOTES

1. Time designated as "Medicine" will include the various divisions such as general medicine, gastroenterology, mental and nervous, dermatology, and syphilology.
2. Time designated as "Surgery" will include the various surgical specialties not otherwise designated.
3. A new method of presenting various medical problems in the manner of an open forum will be held on Tuesday and Thursday.
4. Please note that morning clinics are arranged so that each physician may select the clinics he prefers.
5. All clinics will be held in the medical school.
6. The subject matter of each morning's clinic will be sufficiently varied that duplication will not occur.
7. At 11:00 each morning all clinic groups will assemble in the medical school auditorium.
8. Meals will be served in the medical school cafeteria.
9. Monday evening the annual county medical society secretaries dinner will be held.

Registration fees: No Registration fees for Indiana physicians, $10.00 for out-of-state physicians.

Further details as to subject matter to be presented in the afternoon sessions will be available by writing to the Registrar, Indiana University School of Medicine, Indianapolis, after May fifth.

DISTRICT MEETINGS IN MAY

FIRST DISTRICT

(See Postgraduate Program for First District and Indiana State Medical Association on page 248.)

SECOND DISTRICT

President—J. T. Oliphant, Farmersburg.
Secretary—J. S. Brown, Carlisle.
Place and date of meeting—Vincennes, June 19.

Definite program for this meeting is not completed. The meeting will be held at Harmony Society Park, just outside of Vincennes. There will be two principal speakers and supper will be served at six o'clock in the evening, following the meeting.



Courtesy of Ind. State Library
First State Capitol Building at Corydon

THIRD DISTRICT

President—George Dillinger, French Lick.
Secretary—Fred Bierly, Elizabeth.
Place and date of meeting—Corydon, May 10.

On May 10, 1820, the Medical Society of the State of Indiana was organized, in a meeting at Corydon, then the site of the state capitol. At that meeting Dr. Asahel Clapp of New Albany was made president; Dr. S. Everts of Union City, vice-president; Dr. Livingston Dunlap of Indianapolis, secretary; and Dr. D. V. Mitchell, Corydon, treasurer. Censors were Drs. David Oliver of Brookville, Dr. G. L. Murdoch of Brookville, and Dr. C. Fullerton of Princeton.

On January 11, 1823, the fourth annual meeting of the Medical Society of Indiana was held at Corydon, and the following year the meeting was taken to Indianapolis, the new state capitol.

On May 10, 1935, the Third District Medical Society will celebrate the 115th anniversary of the first State Medical Society. They will assemble at 10:00 a.m. for a scientific meeting, to be followed by the historical discussion, and dinner at 12:30 p. m.

Program

Burns—Charles Emery, Bedford
Hematology in General Practice—Donald Colglazier, Salem
Pulmonary Complications of Influenza—James O. Ritchey, Indianapolis
The County Medical Society—Walter Leach, New Albany
Medical Economics—R. L. Sensenich, South Bend
Historical Discussion—Mr. Lew O'Banion, Corydon
The First State Meeting—Robert Harris, New Albany

FOURTH DISTRICT

Thirty-first Annual Session

President—J. C. Elliott.
Secretary—E. L. Libbert, Lawrenceburg.
Date and place of meeting—May 16, Rising Sun.

Program

9:00 a. m.—Golf—Dearborn Country Club, Aurora.
12:00 m. —Luncheon, House of Delegates, Laughery Club near Rising Sun.
1:30 p. m.—President's Address.
Scientific papers:
Glandular Therapy—William B. Adams, Hanover.
Obstetrical Analgesia—D. D. Dickson, Letts.
Sciatica—F. S. Downey, Dillsboro.
Medical Economics—H. L. Schriver, Cincinnati.
6:30 p. m.—Banquet, Laughery Club House.

FIFTH DISTRICT

President—W. D. Gerrish, Clinton.
Secretary—James V. Richart, Terre Haute.
Date and place of meeting—May 3, Terre Haute.

Program

The Fifth District will hold its May third meeting in conjunction with the Vigo County Medical Society.

Dr. E. L. Sevringhaus, associate professor of medicine at the University of Wisconsin School of Medicine, will speak on "Pituitary and Ovarian Relationship in the Human Being."

SIXTH DISTRICT

President—W. R. Phillips, Glenwood.
Secretary—Frank H. Green, Jr., Rushville.
Place and date of meeting—Rushville, May 9.

Program

Address of Welcome—Roy Shanks, Rushville.
Uterine Hemorrhage—Stanley Gordon, Connersville.
Pediatrics. Special Reference to Deficiency Diseases of Children—Curtis Hoffman, Richmond.
Election of officers.
Future of Surgery—W. D. Inlow, Shelbyville.
Health Insurance—W. U. Kennedy, Newcastle.

The program will begin at 10:00 a. m., in the Rushville City Library. There will be a luncheon at noon and the meeting will be concluded in the afternoon.

EIGHTH DISTRICT

President—R. H. Beeson, Muncie.
Secretary—V. G. McDonald, Anderson.
Place and date of meeting—Anderson, May 15.

Tentative Program

Afternoon session speakers:
Fred Rankin, Lexington, Kentucky.
Fred Willius, Rochester, Minnesota.
Evening session speakers:
John Pemberton, Rochester, Minnesota.
Harold Dunlap, Indianapolis.

NINTH DISTRICT

President—H. B. Shoup, Sharpsville.
Secretary—R. L. Fullerton, Tipton.
Place and date of meeting—Tipton, May 22.

Program

Meeting will be held in the Elks' Home.
Registration—8.30 a. m. and 2:00 p. m.
Golf tournament—9 a. m. to 12:00 m., Elwood Country Club.
Golf luncheon and delegates' luncheon—Elwood Country Club.
Ladies' luncheon, book review, and theater party in Tipton.

Afternoon Scientific Program

Address of Welcome—Boyd Burkhart, Tipton.
Scarlet Fever Immunization and Treatment—L. W. Hunt, Billings Hospital, Chicago.
Practical Application of Gynecology for the General Practitioner—Dr. A. E. Kanter, Chicago.
Acute Surgical Abdomen—G. W. Crile, Cleveland, Ohio.
Banquet at 6:30—Speaker to be announced.

TENTH DISTRICT

President—C. C. Robinson, Indiana Harbor.
Secretary—G. F. Bicknell, East Chicago.
Place and date of meeting—East Chicago, May 9.

Program

1:30 p. m.—Moving picture—Breast Surgery.
2:00 p. m.—Mechanism of Heart Beat and Electrocardiography—L. M. Hurxthal, Boston, Mass.
2:45 p. m.—Arthritis—E. E. Irons, Chicago. (To be illustrated with moving pictures.)
3:30 p. m.—Care of the New Born—Isaac A. Abt, Chicago.
4:00 p. m.—Treatment of Abortion—David S. Hillis, Chicago.
4:30 p. m.—Treatment of Syphilis—Samuel Becker, Chicago.
Vaginal Hysterectomy (moving pictures).
Goiter Surgery.
6:00 p. m.—Dinner at Elks' Club.
7:00 p. m.—Newer Work in Treatment of Cancer by Radiation (X-ray and Radium)—Max Cutler, Chicago.
Moving picture—Harelip and Cleft Palate.
7:45 p. m.—Special Entertainment—Endocrine Sisters and Orchestra.

ELEVENTH DISTRICT

President—W. W. Holmes, Logansport.
Secretary—O. G. Brubaker, North Manchester.
Place and date of meeting—Delphi, May 15.

Program

Business and scientific session—2:00 p. m.
President's address—W. W. Holmes, Logansport.
Pros and Cons of Gall Bladder Disease—E. E. Padgett, Indianapolis.
Tumors—Max Cutler, Chicago.
Fractures—C. L. Viney, Logansport.
Banquet at 6:30.
Ladies will be entertained at the Delphi Country Club by the Ladies' Entertainment Committee—Mrs. Crampton, Mrs. Shultz, and Mrs. Clouser.

TWELFTH DISTRICT

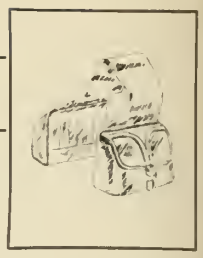
President—F. W. Black, Ligonier.
Secretary—A. J. Sparks, Fort Wayne.
Place and date of meeting—Potowatomi Inn, Lake James, May 23.

Program

Afternoon speakers:
R. L. Sensenich, South Bend, president-elect of the Indiana State Medical Association, will discuss his trip to Washington.
Thomas A. Hendricks, Indianapolis, executive secretary of the Indiana State Medical Association—Medical Organization Problems.
Evening speaker:
Thurman B. Rice, Indianapolis—The Art of Living.



INDIANA MEDICINE IN RETROSPECT



L. G. ZERFAS, M. D.
Historian, Indiana State Medical Association

INFLUENCE OF TRANSYLVANIA UNIVERSITY

WILLIAM T. S. CORNETT, Versailles and Madison, Indiana

Dr. William T. S. Cornett was born at Carrolton, Kentucky (then called Port William), July 11, 1805, of English ancestry. His father died when he was an infant. He received a common school education and was sent to Lexington, Kentucky, to study the Latin and Greek languages in Transylvania University. After this course he was placed by his guardian in the office of a general practi-



Dr. W. T. S. Cornett

tioner of medicine to acquire a knowledge of the medical profession. It was here that he learned to compound drugs and fill prescriptions, a most necessary part of medical education, especially at that time. After a period of three years, during which time he studied diligently, he returned to Transylvania University to attend a course of lectures in the medical department. The course was completed in the winter of 1823-24, when he was nineteen years of age. He began the practice of medicine in 1824 in Dearborn County, Indiana, but soon found that the state law required an examination and the issuance of a license by the district society censors. He passed a satisfactory examination, one of the censors being a Scotchman and a graduate of the University of Edinburgh. At the next meeting of the district society the censors reported him qualified, and a diploma was granted. In the spring of 1825 he removed to Versailles, Ripley County, where he remained in active practice for forty years.

He was chosen a delegate to represent the district society (each judicial district constituted a medical district) when the State Society met in Indianapolis in 1825. It was said that there were few in attendance at that meeting from outside of Indianapolis. The president, Dr. Lawrence S. Shuler of Terre Haute, read his address, but no papers were read by the members. Dr. Cornett had a paper in his pocket, but finding no one else had, made no mention of it. Stone[1] states that this was the last meeting of the then-formed, and original Indiana State Medical Society, but this has been found to be incorrect, and as far as was known in 1894, Dr. Cornett was the only physician then living who was a member of it. He represented the county of Ripley for six years in the state senate of Indiana, beginning in 1841. At the session of 1843-44,[2] when the revenue bill of the house was reported to the senate, he moved to amend the bill so that an additional one cent on the hundred dollars be levied to produce a fund with which to build a lunatic asylum. This amendment was carried in the senate and the house concurred in it; a farm was purchased near Indianapolis, on which the first Indiana hospital for the insane was erected —the Central Hospital for the Insane.

Dr. Cornett was chairman of a committee relative to benevolent institutions, and served as trustee of the State University.[3] He was elected the first president of the medico-chirurgical society of Jefferson County. In 1849, he was elected the first president of the Indiana State Medical Society reorganized at Indianapolis. This society has been in continuous existence since that time, now being known as the Indiana State Medical Association. He delivered the first annual address before the State Medical Society, held at Indianapolis, May 15, 1850,[4] on the subject, "Rise, Progress, Present State and Future Prospects of Medical Science." It was delivered in the evening by candle light. In 1859 he was elected a delegate from the State Society

(Copyright, 1935, L. G. Zerfas, M. D.)

[1] R. French Stone: Biography of Eminent American Physicians and Surgeons. Carlon and Hollenbeck, Indianapolis, 1894, p. 98.

[2] Ibid., p. 99.

[3] William B. Atkinson: The Physicians and Surgeons of the United States. Chas. Robson, Philadelphia, 1878, p. 60.

[4] Transactions of the Indiana State Medical Society, 1850, p. 13.

[5] *Cincinnati Lancet*, January, 1859.

to the National Medical Association, now known as the American Medical Association.

His contributions to medical science cover a wide range of subjects and extend over a period of several years. Digitalis as a Remedy for Amenorrhoea; Cholera at Versailles in 1833; The Rise, Progress, Present Condition and Future Prospects of Medical Science; Observations. A Passive Uterine Hemorrhage[5]; New Suture[6]; Sick Stomach and Vomiting in Pregnancy[7]; A Case of Grangrene of Foot from Ossification of the Leg[8]; Professional Reminiscences[9]; Geology of the Madison Hills.[10]

Ripley County, where he practiced, is a large county, and was at that time heavily timbered. Its early settlements were chiefly in the valleys and along its water-courses. Naturally his large general practice was laborious. The previously recorded activities of his life, aside from his immediate professional duties, are ample evidence of the vigor of both his mind and body.

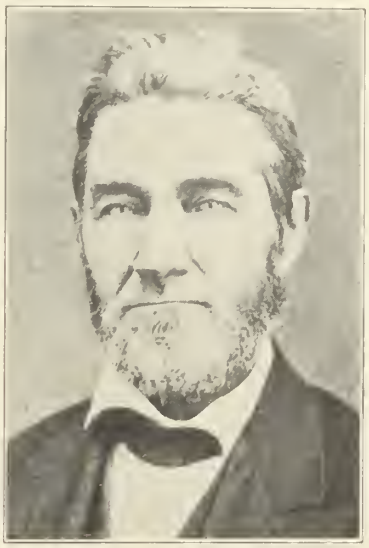
He retired from the active general practice of medicine in 1867 and moved to Madison, Indiana, where he practiced only as a consultant. While here, he became interested in geology, and eventually became thoroughly familiar with the geology of southern Indiana. There can be little doubt that the activities of Dr. Cornett represent a tremendous influence of Transylvania University on medicine in Indiana, its medical organizations, educational institutions, and the wider span of human welfare. He died at Madison, Indiana, May 6, 1897.

NATHANIEL FIELD, Jeffersonville, Indiana

Dr. Nathaniel Field was born in Jefferson County, Kentucky, November 7, 1805, and moved to Jeffersonville, Indiana, in September, 1829, where he practiced medicine until his death, August 18, 1888. He was the son of Abner Field and Jane Pope, both natives of Virginia. His father served in the revolutionary war, and settled in Kentucky in 1784. Dr. Field received the best education Kentucky afforded. He studied medicine at Transylvania University, and was listed on the register in 1825, but no information is available as to his receiving a medical degree, though his biographers state that he was a graduate of that school.

Dr. Field was born in a slave state and the son of a slave-holding family but held anti-slavery views. He was one of the vice-presidents of the first anti-slavery society; was president of the first anti-slavery convention ever held in Indiana, and was president of the first free soil convention held at Indianapolis in 1850.

In July, 1836, he represented Jeffersonville in the Great Southern Railroad convention held at Knoxville, Tenn., for the purpose of devising ways and means of laying out a railroad from Charleston, S. C., to Cincinnati, with a branch to Louisville from a point west of the Cumberland Gap. He represented Clark County in the state legislature in



Dr. Nathaniel Field

1838-39. He was chairman of a select committee to investigate charges against Andrew Wylie, D.D., then president of the State University. Wylie was acquitted of the charges preferred against him.

During the civil war he was surgeon of the 66th Regiment, Indiana Volunteers, and rendered important service both on the battlefields, and in the improvised military hospitals. His surgical experiences thus were extensive.

In 1868 Dr. Field was elected president of the Indiana State Medical Society.

On the first Sunday in March, 1830, he is said to have instituted the Christian Church in the old court house at Jeffersonville, and a second church in August, 1847, of which he was pastor for over half a century.

In addition to these various activities he conducted a large practice, and found time to make contributions of a literary nature, relative to social, religious and medical subjects.

The following list of his medical publications appeared in the Transactions of the Indiana State Medical Society: Cholera,[1] The Troubles and Responsibilities of the Medical Profession,[2] Thoracentesis,[3] The Expectant Mode of Medication,[4] The Etiology of Endemic Fevers,[5] A Notice of Bacteria Microscopy,[6] and Blood Poisoning.[7]

[6] Ibid., August, 1861.

[7] *Western Journal of Medicine*, July, 1869.

[8] Transactions of the Indiana State Medical Society, 1853, p. 151.

[9] Ibid., 1874, p. 30.

[10] *Indianapolis Journal*, July, 1874. Atkinson: The Physicians and Surgeons of the United States, p. 60.

[1] Transactions of the Indiana State Medical Society, 1868, p. 114. [2] Ibid., 1869, p. 1. [3] Ibid., 1872, p. 77. [4] Ibid., 1873, p. 31. [5] Ibid., 1882, p. 84. [6] Ibid., 1883, p. 100. [7] Ibid., 1887, p. 93.

William B. Atkinson, Physicians and Surgeons of the United States, page 173. Pub. by Charles Robson, Philadelphia, 1878, p. 173.

Capt. Lewis C. Baird, Clark County, Indiana. B. F. Bowen & Co., Indianapolis, 1909, p. 413.

G. W. H. Kemper, A Medical History of the State of Indiana. Amer. Med. Assoc. Press, Chicago, 1911, pp. 154, 176, 192, 269.

Transactions, Indiana State Medical Society, 1893, p. 348.

DIPHTHERIA REPORT FOR MARCH 1935

Twelve deaths from diphtheria for the month of March are quite too many. Our only satisfaction is to be found from the fact that of the twelve there was only one school child. There were two persons of adult age, and the remaining nine were of pre-school age, indicating clearly where the problem of immunization lies. Beyond any doubt there has been a reduction from diphtheria among those children who were immunized last year. Unfortunately, however, a large percentage of the pre-school children were missed, and they are the very ones who need it most.

Exactly half of the deaths were in the form of croup. This point will be of interest to parents and to physicians who are frequently called in the middle of the night, saying that a child has the croup. If there is diphtheria in the community, if the child is not one who is subject to spasmodic croup, and if he does not respond immediately to the time-honored remedies for spasmodic croup, it is not unlikely that an emergency is at hand. The best protection against membranous croup or laryngeal diphtheria is immunization of the children at the age of six months or thereabouts.

Four of the remaining six deaths were the result of delayed diphtheria, as may be judged by the fact that death occurred two or three weeks after the onset of the disease. This calls our attention to the fact that the individual convalescing from diphtheria is very subject to organic diseases of the heart or kidneys, and should be treated accordingly.

Below will be found a list of the deaths by counties for the month of March and for the year to date. At the end of the first quarter of the year there have been thirty deaths. This figure compares with 35 during 1934; 41 during 1933; 53 for 1932; 39 for 1931, and 42 during 1930.

County	No. Deaths March, 1935	Total for 1935
Allen	0	3
Boone	1	1
Bartholomew	0	1
Crawford	1	1
Delaware	0	1
Fayette	0	1
Grant	1	1
Jackson	1	1
Knox	1	1
Lawrence	0	2
Lake	0	1
LaPorte	1	1
Madison	0	1
Marion	2	9
Spencer	1	1
Tippecanoe	1	1
Warrick	0	1
Wayne	1	1
Steuben	1	1
Total	12	30

THURMAN B. RICE, M. D., Chairman,
Diphtheria Prevention Committee.

SECRETARIES' COLUMN

The following is a sample of a notice sent out by the Clinton County Medical Society. Maybe this letter will help you in rounding up delinquents:

"My dear Doctor ————:

"In going over the list of the members of the Clinton County Medical Society I find that you have not paid your dues for the current year.

"Right now with various agencies, outside, trying to improve the practice of medicine it certainly behooves organized medicine to watch very carefully all forms of change and much more so those forms which do not have the approval of the physician in the field because they savor so much of state medicine.

"You will find upon investigation that most of the uplifters either have some form of social service degree or none at all yet they are demanding the right to tell the 'Honest to God Doctor' what to do and when to do it.

"Now, Doctor, if the affairs of the local society have not met with your approvel we are always open to suggestions and are more than glad for friendly criticisms.

"Please let us hear from you and, more than anything else, join the ranks of organized medicine to protect the rights of the man in the ranks."

Mr. Milbank speaks again. The following is quoted from an address given by him in New York, March 28, 1935.

"The policy of our fund will be to maintain a scientific and objective attitude toward any project that engages its attention to the end that the problem may be clearly seen and stated and that the solution may be the result not of biased preconceptions but of logical unimpassioned reasoning.

"I would restate briefly certain points which I have made on other occasions.

"Our Board of Directors has not endorsed compulsory contributory health insurance or any other plan to distribute the costs of medical care.

"We have not sponsored any form of legislation, federal or state, bearing upon this subject nor have we given, directly or indirectly, any financial support in furtherance of such legislation.

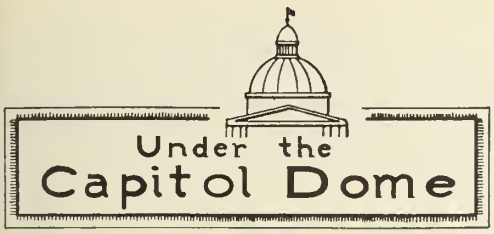
"The studies made by the members of our staff on this, or any other subject in the field of public health, as broadly defined, will be made available to the various groups interested in that field, but the fund will not assume the role of advocate either in favor or against specific solutions of the problems which are the subject matter of such studies.

"We will cooperate with the groups operating in the broad field of health—whether they be doctors, dentists, hospital managements, nurses, welfare organizations or governmental agencies—to the extent that our cooperation is desired and to the extent that a basis of mutual helpfulness can be established within the resources at our disposal.

"I had the privilege of attending some of your working sessions today and I was again impressed with the worthwhileness of these annual meetings.

"In concluding this word of greeting to you this evening, I would again express the grateful acknowledgment of our directors for the very real service which you are rendering in reviewing, criticizing and advising as to the program of the fund which, while preserving a certain basic continuity, is constantly subject to those progressive changes which are inherent in any living organism."

A. M. MITCHELL, M. D., *Chairman.*



Following is a list of physicians to whom temporary permits and permanent certificates have been issued for the period from January 1, 1935, to March 31, 1935:

Temporary Permits	*Date Issued*
Jones, Ralph Earl	February 1, 1935
Stone, Fred D.	February 1, 1935
Miller, William Estill	February 1, 1935
Becker, Philip Herman	February 1, 1935
Dillman, Carl Edward	February 5, 1935
Fipp, August Lorenz	March 11, 1935
Haynes, John Ellis	March 14, 1935
Permanent Certificates	
Weber, Edgar H.	January 25, 1935
Pugh, Willis Law	January 30, 1935
Shaw, Houston W.	January 16, 1935
Drake, John Calvin	February 1, 1935
Owens, John B.	February 9, 1935
Ryan, Glen Van	February 13, 1935
Woods, Amelia T.	March 1, 1935
Adams, William B.	March 6, 1935
Adams, Julia L.	March 6, 1935
Shiflett, Emery Lee	March 9, 1935
Helms, Robert W.	March 9, 1935

* * *

A ruling that city health officers are not required to accept health certificates signed by chiropractors has been issued by Philip Lutz Jr., attorney general of Indiana.

The opinion was written for Dr. Verne K. Harvey, director of the state department of public health, and was in connection with the recent refusal of Dr. H. G. Cole of Hammond to accept certificates signed by Holloway Ford, a Hammond chiropractor. Dr. Cole is secretary of the Hammond health board. He refused to accept two certificates attesting the health of two persons asking permission to handle food.

"It is a well recognized fact that a chiropractor by his license to practice his profession is limited in his field in that he is a drugless physician and that he need be proficient in the studies prescribed for him in the Medical Practice Act," the attorney general's opinion said. "A certificate signed by a chiropractor should have weight when the statements therein contained are limited to his field of practice. Likewise would a certificate bear weight and be acceptable when coming from any one of the many other classes of the practice of medicine when confined to the particular field of the subscriber of said certificate."

A health officer is required to accept any health certificate only when the officer "has determined the weight to be given it as tested by the above definitions and citations. We know of no law that specifies the kind and quality of a health certificate. Since it is the duty of the health officer to conserve the best interests of society from the standpoint of health, he is given wide and broad powers in matters concerning acceptance of health certificates and is not required to accept the same from any branch of the profession until he is convinced of the knowledge and qualifications of the person signing the same," the opinion said.

At one point the opinion said: "It follows further that a health certificate, to be recognized as such, should bear the signature of one in authority to diagnose human ills generally."

* * *

Members of the medical profession who do their hunting and fishing in Indiana will be interested in a booklet containing all conservation laws passed by the recent General Assembly which will be issued soon by the state conservation department. A total of twenty-nine laws affecting hunting, fishing, and other activities administered by the conservation department were passed by the legislature and approved by the Governor.

* * *

The state board of medical examination and registration has refused the petition of Clarence J. Myler, a chiropractor of LaGrange County, to be reinstated. His license was revoked after he was convicted in 1933 on a criminal assault charge.

* * *

UNITED STATES INTERNAL REVENUE COLLECTION INCREASE IN INDIANA

United States internal revenue collections from all sources in Indiana for the month of March, 1935, were $9,030,245.08 as against $5,151,714.45 for the month of March, 1934.

Total collections for the quarter—January 1 to March 31, 1935—were $16,670,890.11 as against $9,969,029.88 for the quarter ending March 31, 1934.

Total collections for the nine-month period—July 1, 1934, to March 31, 1935—were $45,652,354.31 as against $22,783,026.83 for the same period, July 1, 1933, to March 31, 1934.

Exclusive income tax collections for the month of March, 1935, showed an increase of 57 per cent over March, 1934. This includes both individuals and corporations. The increase on corporations was 64 per cent. The percentage of increase in all districts of the United States was 39.7 per cent.

* * *

The State Board of Medical Examination and Registration has issued a license to Dr. J. Verling Walrod of Peru to practice osteopathy. The license was granted through the reciprocal agreement with the State of Michigan.

DEATH NOTICES

RUFUS A. HOOVER, M. D., of Hope, died March twenty-second, aged sixty-two years. Dr. Hoover was a member of the Bartholomew County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Bennett College of Eclectic Medicine and Surgery, Chicago, in 1912.

BENJAMIN J. COOKE, M. D., Negro physician of Indianapolis, died March twenty-second, aged fifty-nine years. Dr. Cooke was a graduate of the Meharry Medical College, Nashville, in 1890.

WILLIAM D. CONN, M. D., of Bainbridge, died April fourth, aged seventy-four years. Dr. Conn was a member of the Putnam County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Louisville Medical College in 1893.

JOHN M. PHIPPS, M. D., of Indianapolis, died April eleventh, aged seventy years. He was a graduate of the Hospital College of Medicine, Louisville, in 1899.

DAVID C. WYBOURN, M. D., of Ossian, died March twenty-third, aged fifty-six years. Dr. Wybourn had been ill for several months. He was a graduate of the Fort Wayne College of Medicine in 1902 and was a member of the Wells County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

EDWARD H. GRISWOLD, M. D., of Peru, died April fifth, after an illness of several months. Dr. Griswold was eighty years of age. He had been surgeon in charge of the Wabash Railway Hospital in Peru for a period of forty-three years. He graduated from the University Medical College of Kansas City in 1891, and was a member of the Miami County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association and the American College of Surgeons.

CHARLES L. DREESE, M. D., retired physician of Goshen, died March twenty-ninth, aged eighty-six years. Dr. Dreese graduated from the Fort Wayne College of Medicine in 1881.

A. R. REED, M. D., of Jeffersonville, died in the U. S. Veterans Hospital in Indianapolis, March thirty-first. Dr. Reed was sixty-seven years of age. He was a graduate of the Kentucky School of Medicine, Louisville, in 1896.

HOOSIER NOTES

THE American Urological Association will meet in San Francisco, June 25-28.

DR. JOHN R. HARROLD of Roll celebrated his eighty-seventh birthday, March twenty-fourth.

ACCORDING to newspaper reports, Dr. C. C. Rayl of Decatur plans to have constructed a clinic and physicians' office building in Decatur.

THE class of 1905 of the Indiana University Medical School held its thirtieth anniversary celebration in Indianapolis, April nineteenth.

DR. L. P. HARSHMAN of Fort Wayne talked on "Human Sterilization" before the Dekalb County Teachers' Institute in Auburn, April first.

THE first annual meeting of the American Neisserian Medical Society will be held June 11, 1935, at the Claridge Hotel in Atlantic City.

DR. B. J. TEAFORD of Jonesville has been appointed health commissioner for Bartholomew County to succeed the late Dr. R. A. Hoover of Hope.

INDIANAPOLIS will entertain the 1936 convention of the Society of American Bacteriologists. More than 450 delegates will attend the session in December, 1936.

THE Huntington County Medical Society and the Huntington County Parent-Teacher Association combined efforts in an intensive diphtheria immunization campaign early in April.

DR. MAX GITLIN of Bluffton has moved his office from the Odd Fellow Building, where he has been located for nine years, to the Gitlin Building at 121 East Market Street in Bluffton.

Dr. Max Bahr gave an illustrated lecture on "The Application of Modern Therapy for the Mind Deranged" before a meeting of the Florence Nightingale Club of the Indianapolis City Hospital, April fifth.

THE eleventh scientific session of the American Heart Association will be held on Tuesday, June 11, 1935, at the Hotel Claridge, Atlantic City, New Jersey. The program will be devoted to various subjects on cardiovascular disease.

ELMER I. MCKESSON, M. D., noted anesthetist, and inventor of anesthesia apparatus, died in Toledo, February twenty-second, at the age of fifty-four. Dr. McKesson was once a resident of Walkerton, Indiana, and taught school there.

THE annual meeting of the Academy of Physical Medicine will be held at the Claridge Hotel, Atlantic City, June twelfth and thirteenth. Arthur H. Ring, M. D., of Arlington, Massachusetts, is secretary-treasurer of the Academy.

THE Hamilton County Medical Society, at its meeting of April ninth, opposed by resolution any reduction in its present fee schedule, either for indigent care through FERA or otherwise. The secretary asks that other societies please note!

THE annual meeting of the American Association for the study of Goiter will be held in Salt Lake City, Utah, June 24, 25, and 26, 1935. Complete program may be obtained by writing to the corresponding secretary, Dr. W. Blair Mosser, Kane, Pennsylvania.

SEVERAL physicians of the Madison County Medical Society are addressing parent-teacher association meetings on health activities and ideas. The talks are given in conjunction with a health education project sponsored by the Madison County Society.

A CHAPTER of the Psi Iota Xi sorority at Princeton has presented to the Princeton Methodist Hospital an oxygen-aire apparatus. Members of the sorority, members of the Gibson County Medical Society, and nurses from the hospital were present for the presentation, March twenty-fourth.

THE Tri-State Medical Association which held its annual meeting in Lima, April ninth, selected Fort Wayne as the place for its 1935 convention. Dr. E. P. Gillette of Toledo was made president; Dr. H. E. Randall of Flint, Michigan, vice-president, and Dr. W. E. Kelly, Laporte, secretary.

AN UNUSUAL accident occurred at Salem, February twenty-sixth, when an automobile of which the driver had lost control plunged through the plate glass window in the office of Drs. L. W. and C. B. Paynter, injuring both physicians. Dr. L. W. Paynter suffered several broken ribs and minor injuries, and Dr. C. B. Paynter was severely cut by flying glass.

NEW officers for the Indiana Academy of Ophthalmology and Otolaryngology, elected at the April 10th meeting, are Dr. J. R. Dillinger, French Lick, president; Dr. E. E. Holland, Richmond, first vice-president; Dr. W. R. Hickman, Logansport, second vice-president; Dr. F. V. Overman, Indianapolis, secretary-treasurer (re-elected). Martinsville was selected as the place for the 1936 meeting.

TWO men have each been sentenced to two years in the penitentiary for conspiracy to violate the Federal Food and Drugs Act by falsely labelling and selling "Warm Springs Crystal Compound" as coming from the Georgia springs of that name. The "crystals" did not come from that source and were only a simple laxative composed of Glauber's salts, and cost only a few cents per pound, though they were sold for a dollar per pound.

THE Indiana Tuberculosis Association held a two-day convention at the Lincoln Hotel in Indianapolis, April sixteenth and seventeenth. Dr. Horton Casparis of Vanderbilt University School of Medicine and Dr. Frank Forry of Indianapolis addressed the group at the evening meeting on the subject of "Modern Aspects of the Tuberculosis Problem." Dr. Paul Crimm of Evansville was elected president; Donald DuShane of Columbus was made first vice-president; Dr. C. J. McIntyre of Indianapolis, second vice-president; Dr. E. M. Amos of Indianapolis, treasurer; and Mrs. William Gremmelspacher, Logansport, secretary.

A MOTION picture entitled "Around the Clock with You and Your Baby" for use in educating mothers in the care of the newborn, has been produced by the department of obstetrics and gynecology of the University of Southern California. There are three reels of 35 mm. film, requiring about thirty-five minutes, and it may be borrowed without charge by any ethical hospital if shown at least twice a week and if a report of the number of showings and number of persons who saw the film is made. Information concerning the film may be had by writing Dr. Tollefson, 511 South Bonnie Brae Street, Los Angeles.

IN COOPERATION with Purdue University and at the invitation of Dr. S. J. Miller, director of the Student Health Department, members of the Tippecanoe County Medical Society have been granted the opportunity of broadcasting over Station WBAA. These broadcasts will occur every Thursday from 1 p. m. to 1:15 p. m. Dr. F. T. Romberger will speak on May second and ninth; Dr. F. S. Crockett, May sixteenth and twenty-third; and Dr. D. C. McClelland, May thirtieth. It is hoped that other members of the society will accept later dates.

The American Neisserian Medical Society, founded June 12, 1934, is dedicated to the promotion of knowledge in all that relates to the gonococcus and gonococcal infections that there may be attained improvement in the management of gonorrhea and a reduction in its prevalence. There are 115 charter members and the officers are: Executive Committee—Dr. Edward L. Keyes, New York, honorary president; Dr. J. Dellinger Barney, Boston, president; Dr. P. S. Pelouze, Philadelphia, vice-president; Dr. A. L. Clark, Oklahoma City; Dr. Walter Clarke, New York; Dr. R. D. Herrold, Chicago; Dr. N. A. Nelson, Boston; Dr. Oscar F. Cox, Jr., Boston, secretary-treasurer.

The society plans to carry out the following program:

A. The scrutiny of the management of gonorrhea in both male and female.

B. Clinical and laboratory research in the diagnosis, medical and social pathology, and the treatment of gonorrhea.

C. Dissemination among the medical profession and the public of authoritative information concerning gonorrhea.

Membership is limited to:

A. Residents of the United States or its territories, Canada or Mexico.

B. Graduates of a medical school recognized by the American Medical Association.

C. Those who are engaged in some phase of the management of gonorrhea.

Invitation to membership is extended to all qualified physicians who desire to work for improvement in the management of gonorrhea. Application blanks may be obtained from the secretary, Oscar F. Cox, Jr., M. D., 475 Commonwealth Ave., Boston, Mass.

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Bilhuber-Knoll Corporation
Dilaudid Compound Tablets, ½ grain.

The Calco Chemical Co.
Aminoacetic Acid

The Cutter Laboratory
Diphtheria Toxoid Alum Precipitated, Refined

Hoffmann-La Roche, Inc.
Alurate
Alurate Tablets, 1 grain.
Elixir Alurate.
Sodium Alurate
Capsules Sodium Alurate, 3½ grains.

Jensen-Salsbery Laboratories, Inc.
Diphtheria Toxoid, Alum Precipitated (Refined).

Lederle Laboratories, Inc.
Scarlet Fever Streptococcus Immunizing Toxin
Scarlet Fever Stroptococcus Toxin for the Dick Test

Eli Lilly & Co.
Metycaine Tablets, ½ grain
Ophthalmic Ointment Metycaine, 4 per cent

Merck & Co., Inc.
Tablets Cebione-Merck, 0.05 Gm.
Cebione-Merck
Ampules Cebione-Merck, 0.1 Gm.
Tablets Cebione-Merck, 0.01 Gm.

Wm. S. Merrell Co.
Diothane Ointment 1% Ophthalmic Tube.

Parke, Davis & Co.
Capsules Silvol, 6 grains.
Kapseals Ortal Sodium with Amidopyrine.
Capsules Ortal Sodium, 5 grains (.3 Gm.)
Meningococcus Antitoxin

Pfanstiehl Chemical Co.
Aminoacetic Acid-Pfanstiehl.

E. R. Squibb & Sons
Ipral-Amidopyrine Tablets, 4.33 grains
Ipral Sodium
Ipral Sodium Tablets, 4 grains.

Frederick Stearns & Co.
Neo-Synephrin Hydrochloride Jelly.

United States Standard Products Co.
Bermuda Grass Pollen Extract, U. S. S. P. Co.; Box Elder Pollen Extract, U. S. S. P. Co.; Burweed Pollen Extract, U. S. S. P. Co.; Careless Weed Pollen Extract, U. S. S. P. Co.; Cocklebur Pollen Extract, U. S. S. P. Co.; Corn Pollen Extract, U. S. S. P. Co.; Cosmos Pollen Extract, U. S. S. P. Co.; Cottonwood (Poplar) Pollen Extract, U. S. S. P. Co.; Dandelion Pollen Extract, U. S. S. P. Co.; Elm Pollen Extract, U. S. S. P. Co.; English Plantain Pollen Extract, U. S. S. P. Co.; Goldenrod Pollen Extract, U. S. S. P. Co.; Grasses Combined Pollen Extract, U. S. S. P. Co. (Bermuda Grass, June Grass, Orchard Grass, Red Top, Sweet Vernal Grass and Timothy in equal parts); Johnson Grass Pollen Extract, U. S. S. P. Co.; June Grass Pollen Extract, U. S. S. P. Co.; Lambs Quarters Pollen Extract, U. S. S. P. Co.; Maple Pollen Extract, U. S. S. P. Co.; Marsh Elder Pollen Extract, U. S. S. P. Co.; Mugwort (Wormwood) Pollen Extract, U. S. S. P. Co.; Orchard Grass Pollen Extract, U. S. S. P. Co.; Pigweed (Redroot) Pollen Extract, U. S. S. P. Co.; Ragweed (Common) Pollen Extract, U. S. S. P. Co.; Ragweed (False) Pollen Extract, U. S. S. P. Co.; Ragweed (Giant) Pollen Extract, U. S. S. P. Co.; Ragweed (Western) Pollen Extract, U. S. S. P. Co.; Ragweed Combined Pollen Extract, U. S. S. P. Co. (Giant and Common Ragweed, in equal parts); Red Oak Pollen Extract, U. S. S. P. Co.; Red Top Pollen Extract, U. S. S. P. Co.; Russian Thistle Pollen Extract, U. S. S. P. Co.; Rye Grass Pollen Extract, U. S. S. P. Co.; Sweet Vernal Grass Pollen Extract, U. S. S. P. Co.; Timothy Pollen Extract, U. S. S. P. Co.; White Ash Pollen Extract, U. S. S. P. Co.; White Oak Pollen Extract, U. S. S. P. Co.

Winthrop Chemical Co., Inc.
Ampules 1% Isotonic Solution Tutocain with Suprarenin, 1:20,000, 3 cc.
Tablets Alypin, 1/3 grain.

Nonproprietary Articles
Cevitamic Acid.
Aminoacetic Acid.

The following product has been accepted for inclusion in the List of Articles and Brands Accepted by the Council but not described in N. N. R. (New and Non-official Remedies, 1934, p. 443):

Merck & Co., Inc.
Creosote-Merck.

Sharp & Dohme
Ampules Sodium Cacodylate-Mulford, 7½ grains, 5 cc.

INDIANA UNIVERSITY NEWS NOTES

Dr. Royd Ray Sayers, Indiana University graduate, who is employed with the Public Health Service of Washington, D. C., was one of the 25 men nominated by the *Medical News Magazine* as having made the greatest contribution to medical science in 1934. Dr. Sayers received recognition for his administrative and research work in connection with the prevention of occupational diseases. He received the A. B. and A. M. degrees from Indiana in 1907.

Nine Indiana University medical students recently were initiated into the Phi Beta Pi professional medical fraternity. Initiation services, which were followed by a formal dinner and dance, were held at the Lincoln Hotel, Indianapolis. The newly initiated men are: Norman Richard, Fort Wayne; Arthur Maines, Richmond; Meredith Flanigan, Milltown; Thomas Shields, Brownstown; Mychyle Johnson, Indianapolis; Richard Emme, Harlan; Richard Stauffer, Fort Wayne; Julius Mark, Old Forge, Pa.; John Hancock, Indianapolis.

Linville Baker of Cambridge City has been elected president of the Theta Kappa Psi professional medical fraternity. Robert Bridgeford of South Bend is the newly-elected vice-president of the medical fraternity; Gordon Bailey of Evansville is secretary-treasurer, and Archibald Hickman of Hammond is historian.

Dr. W. D. Gatch, dean of the Indiana University School of Medicine at Indianapolis, and Dr. Charles McCormick and Dr. Robert Emerson, Indianapolis physicians, were the principal speakers at the initiation services of the Nu Sigma Nu professional medical fraternity held recently in Indianapolis. These three doctors discussed the obligations of young doctors today in keeping up with modern science.

The initiates are as follows: George House, Indianapolis; Ben Siebenthal, Bloomington; Edward Smith, Petersburg; Richard Schug, Decatur; William Montgomery, Plymouth; William Rossman, Cairo, Ill.; John Atwater, Indianapolis; Robert Acker, Terre Haute; Rudolph Myers, Bloomington; Charles McCormick, Indianapolis; Edwin Trook, Marion; Stan Garner, Indianapolis.

SOCIETIES AND INSTITUTIONS

COUNTY MEDICAL SOCIETY REPORTS

ALLEN COUNTY (FORT WAYNE) MEDICAL SOCIETY members met at the Chamber of Commerce, Fort Wayne, March nineteenth, to hear Dr. Walter M. Simpson of Dayton, Ohio, discuss "Artificial Fever Therapy." Dr. Simpson discussed the results of four years' work with the Kettering Hypertherm. Attendance numbered forty-five members and five guests.

At the April second meeting, clinical cases were presented by various members.

Dr. C. C. Sturgis, of Ann Arbor, Michigan, discussed "Treatment of the Anemias" at the April sixteenth meeting.

* * *

CARROLL COUNTY MEDICAL SOCIETY met in the Flora Community Building, Flora, March thirteenth, when the members of the Clinton County Medical Society attended and supplied the program. Attendance numbered forty-four.

The Carroll County Society met at Delphi, April twelfth, with Drs. E. B. Ruschli of Lafayette and E. E. Padgett of Indianapolis as principal speakers. Dr. Ruschli's subject was "Goiter" and Dr. Padgett's subject was "Operating the Diabetic."

* * *

CASS COUNTY MEDICAL SOCIETY held its March fifteenth meeting at Logansport, with Dr. R. L. Sensenich, of South Bend, as principal speaker. Dr. Sensenich's subject was "Acute Duodenitis." Attendance numbered thirty.

* * *

CLINTON COUNTY MEDICAL SOCIETY members went to Flora, March fourteenth, where they were guests of the Carroll County Medical Society for a dinner meeting. Clinton County members supplied a part of the program: "The Medical Man of the Future," by Dr. Ivan E. Carlyle; "Surgical Conditions of the Biliary Tract," by Dr. H. R. Royster; and a paper prepared by Dr. S. B. Sims was read by Dr. S. A. Hedgecock. This was the second meeting of its kind this year; on a former occasion the Carroll County members were guests of the Clinton County Society.

The April fourth meeting of the Clinton County Medical Society was held at the Coulter Hotel in Frankfort. Dr. Goethe Link, of Indianapolis, presented a paper on "Chronic Mild Thyroid Disease."

* * *

DEARBORN-OHIO COUNTY MEDICAL SOCIETY met at Lawrenceburg, March twenty-eighth, for a dinner meeting. Arrangements were discussed for the district meeting to be held near Rising Sun, May sixteenth.

* * *

ELKHART COUNTY MEDICAL SOCIETY had an attendance of more than seventy physicians at its annual meeting, April fourth. Doctors from St. Joseph, LaPorte and Elkhart counties were present. Dr. Donald Abbott, of Chicago, was the principal speaker; his subject was "Gastro-Enterology." Clinical cases were presented in the afternoon; dinner was served at the Hotel Elkhart in the evening, following which Dr. Abbott presented his paper.

* * *

FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY members met at the McFarlan Hotel, Connersville, April ninth, with Dr. Durbin C. Day, of Chicago, as speaker; his subject was "Cancer of the Digestive Tract."

* * *

FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY met at Kingman, April fourth, with Dr. Louis H. Segar, of Indianapolis, as principal speaker, presenting a paper on "Recent Advances in Pediatrics." Attendance numbered forty-two.

GIBSON COUNTY MEDICAL SOCIETY members met at Princeton, April eighth, for a dinner meeting. Dr. George Garceau, of Indianapolis, was the principal speaker; his subject was "Back Pains."

* * *

GRANT COUNTY MEDICAL SOCIETY members heard Dr. Fred Rankin, of Lexington, Kentucky, at the March twenty-sixth meeting.

* * *

HAMILTON COUNTY MEDICAL SOCIETY met at Cicero, April ninth. Dr. James Balch, of Indianapolis, presented an illustrated lecture on "Urology." At the business session, the society passed a resolution opposing any reduction in its present fee schedules, either for indigent care through FERA or otherwise. Thirteen members and nine visitors attended the meeting.

* * *

HENDRICKS COUNTY MEDICAL SOCIETY members met at Danville, March twenty-ninth, for a dinner meeting. Dr. Walter E. Pennington, of Indianapolis, presented a paper on "Treatment of Malignant Diseases."

* * *

HOWARD COUNTY MEDICAL SOCIETY held its April dinner meeting at Kokomo at the Frances Hotel. Dr. L. G. Zerfas, of Indianapolis, talked on "Anemia."

* * *

HUNTINGTON COUNTY MEDICAL SOCIETY members met at the Hotel LaFontaine, Huntington, April second. Drs. W. C. Moore and L. G. Montgomery, of Muncie, presented a symposium on "Surgical Pathology of Appendicitis." Attendance numbered nineteen.

* * *

INDIANAPOLIS MEDICAL SOCIETY held its March twenty-sixth meeting at the Athenaeum, when a symposium on diseases of the thyroid gland was presented by Dr. Harold F. Dunlap, Dr. Cleon A. Nafe, and Dr. H. C. Thornton.

Drs. H. F. Beckman, C. A. Weller, and Fred Cheney presented papers on diabetes at the April second meeting, held in the Athenaeum.

The April ninth meeting was held in the auditorium of the Indiana University School of Medicine—a joint meeting with the staff of the medical school.

April sixteenth, the Indianapolis Medical Society held a joint meeting with the Indiana Tuberculosis Association, at the Lincoln Hotel. Dr. Horton Casparis, of Vanderbilt University School of Medicine, talked on "Modern Aspects of the Tuberculosis Problem."

* * *

JASPER-NEWTON COUNTY MEDICAL SOCIETY members met with Dr. W. C. Mathews, of Kentland, March twenty-eighth. Dr. E. P. Sloan, of Bloomington, Illinois, talked on "Indications for Thyroidectomy."

* * *

JAY COUNTY MEDICAL SOCIETY members met at Portland, April fifth. The speaker was Dr. Carl W. Sawyer, of Marion, Ohio, who discussed "Causes of Insanity." Attendance numbered twenty-one.

* * *

KNOX COUNTY MEDICAL SOCIETY held a meeting in Vincennes, April ninth, with Dr. Charles P. Emerson, of Indianapolis, as principal speaker. Dr. Emerson discussed diseases of the Orient as compared with American diseases.

* * *

KOSCIUSKO COUNTY MEDICAL SOCIETY met with the Marshall County Society at Plymouth, April third. Dr. C. Norman Howard, of Warsaw, was the principal speaker; his subject was "Eye, Ear, Nose and Throat in Relation to General Medicine."

* * *

LAKE COUNTY MEDICAL SOCIETY met at the Lake County Tuberculosis Sanitorium for a dinner meeting, April eleventh. Dr. C. W. Rauschenbach, of Hammond, presented a paper on "The Normal Chest, from the X-ray Standpoint," and Dr. J. Sagel, of Gary, talked on "Empyema."

The May meeting, the last one before the summer vacation, will be held at St. Catherine's Hospital in East Chicago, at the time of the Tenth District Medical Society meeting.

* * *

LAPORTE COUNTY MEDICAL SOCIETY met at the American Restaurant in Laporte, March twenty-first, to hear Dr. Raymond W. McNealy discuss "Peptic Ulcer as a Surgical Problem." Attendance numbered twenty-four.

* * *

LAWRENCE COUNTY MEDICAL SOCIETY members heard Dr. A. F. Weyerbacher and Dr. E. B. Mumford, of Indianapolis, at their April third meeting, held in the Greystone Hotel at Bedford. Dr. Weyerbacher discussed "Urinary Antiseptics," and Dr. Mumford talked on "Knee Disabilities."

The Woman's Auxiliary to the Lawrence County Medical Society met April third at Bedford for a luncheon meeting, at the home of Mrs. Morrell Simpson.

* * *

MARSHALL COUNTY MEDICAL SOCIETY members met at the Grand Hotel, Plymouth, March sixth, with Dr. C. C. Dubois, of Warsaw, as speaker; his subject was "The Anemias—with Special Reference to the Anemias of Childhood." Attendance numbered sixteen.

The Kosciusko County Medical Society met with the Marshall County Society at Plymouth, April third, with Dr. C. N. Howard, of Warsaw, as principal speaker.

* * *

MIAMI COUNTY MEDICAL SOCIETY members met at Peru, March twenty-ninth. Dr. B. F. Eikenberry, of Peru, and John Van Osdol, D. D. S., of Peru, discussed "Focal Infections." This was a joint meeting of the Miami County Medical Society and the Miami County Dentists' Society. Attendance numbered twenty-five.

* * *

MUNCIE ACADEMY OF MEDICINE met at the Hotel Roberts, Muncie, April second, to hear Dr. E. P. McCullagh, of Cleveland, Ohio, talk on "Newer Knowledge of the Hormones."

At the April ninth meeting of the Muncie Academy, Dr. E. E. Padgett, of Indianapolis, discussed "Diabetes in Surgery."

* * *

NORTHEASTERN INDIANA ACADEMY OF MEDICINE met at the Kendall Hotel, Kendallville, March twenty-eighth, for a dinner meeting. Dr. Max A. Bahr, of Indianapolis, talked on "Dynamic Factors in Mental Disease."

* * *

ORANGE COUNTY MEDICAL SOCIETY members met at French Lick, April ninth, to discuss the possibility of conducting a diphtheria immunization campaign.

* * *

OWEN COUNTY MEDICAL SOCIETY members met at Spencer, February twenty-first, to hear Dr. Walter Foreman, of Rockville, discuss "Early Diagnosis of Tuberculosis."

At the March twenty-eighth meeting, held in Spencer, Dr. R. H. Richards, of Patricksburg, discuss "Arthritis."

* * *

PUTNAM COUNTY MEDICAL SOCIETY members held regular meetings and attended a dinner meeting as guests of the Clay County Medical Society at Brazil, March twenty-eighth. Dr. E. E. Padgett, of Indianapolis, spoke on "Medical Economics."

At the April ninth meeting, held in the Putnam County Hospital, Dr. Jewett V. Reed, of Indianapolis, and Dr. LaRue Carter, of Indianapolis, were principal speakers.

* * *

RANDOLPH COUNTY MEDICAL SOCIETY met at the Randolph County Hospital, April eighth. Dr. Wayne Harmon, of Modoc, presented a paper on "Primary Pernicious Anemia."

* * *

RUSH COUNTY MEDICAL SOCIETY held its regular monthly dinner meeting, April ninth, at Rushville. Dr. B. L. Harrison, of Newcastle, spoke on "Hemorrhage of the Gastro-Intestinal Tract."

* * *

ST. JOSEPH COUNTY MEDICAL SOCIETY met, March twelfth, at South Bend. Dr. D. H. Condit, of South Bend, presented a

paper on "Placenta Previa" before the thirty-five members and two guests who were present.

On March nineteenth, Dr. D. A. Bickel discussed "Caesarean Section." Thirty-five members and three guests were present at this meeting. Dr. W. E. Miller was elected a member, by transfer from the Saginaw County Medical Society in Michigan.

The March twenty-seventh meeting of the St. Joseph County Medical Society was a dinner meeting held in the Jefferson Plaza. Dr. Phillip Smith, of Northwestern University, talked on "The Treatment of Fibroid Tumors of the Uterus." Attendance at this meeting numbered forty-seven.

Dr. H. B. Shedd, of South Bend, discussed "Asthenopia and Its Symptoms" before the April second meeting of the St. Joseph County Society. Attendance numbered twenty-three.

* * *

SHELBY COUNTY MEDICAL SOCIETY members met at Shelbyville, April third. Dr. Harold Trusler, of Indianapolis, discussed "Burns." Attendance numbered twenty-two. This was a dinner meeting.

* * *

SULLIVAN COUNTY MEDICAL SOCIETY met at the Mary Sherman Hospital, April third, for a routine business meeting.

* * *

TIPPECANOE COUNTY MEDICAL SOCIETY met at Lafayette, April eleventh, with Dr. Joseph Brenneman, of Chicago, as principal speaker. A clinic was held at the Lafayette Home Hospital in the afternoon, and in the evening a paper on "The Acute Abdomen in the Child" was presented, following the dinner meeting at Lincoln Lodge. There was an attendance of thirty at the clinic and eighty at the evening meeting.

* * *

TIPTON COUNTY MEDICAL AND DENTAL SOCIETIES held a meeting at Tipton, March twenty-sixth. Dr. F. S. Crockett, of Lafayette, gave an interesting talk on sickness insurance.

* * *

VANDERBURGH COUNTY MEDICAL SOCIETY met at Evansville, April ninth, when Dr. C. O. Richey, of Evansville, presented a paper on "Functional Disorders of the Intestine." Attendance numbered thirty-eight.

* * *

WABASH COUNTY MEDICAL SOCIETY members met at the Wabash County Hospital for a dinner meeting, April third, as guests of Drs. Steffen, Kidd, and Walker. Dr. E. M. VanBuskirk, of Fort Wayne, presented a paper on "Non-malignant Tumors of the Stomach," and Dr. Charles Cooney, of Fort Wayne, talked on "Bladder Tumors and Urinary Diseases in Children."

* * *

WAYNE-UNION COUNTY MEDICAL SOCIETY held a meeting at Richmond, March twenty-eighth, when Dr. G. W. Gustafson, of Indianapolis, discussed "Common Obstetrical Problems." Dr. Gustafson's talk was illustrated with pictures and slides. Attendance numbered thirty-five.

* * *

WHITLEY COUNTY MEDICAL SOCIETY members met at Columbia City, April twelfth, to hear Dr. R. W. Wilkins, of Fort Wayne, present a paper on "Functional Uterine Bleeding."

INDIANA STATE MEDICAL ASSOCIATION
THE EXECUTIVE COMMITTEE

March 10, 1935.

Meeting called to order at 10:45 a. m.

Roll call showed the following present: W. H. Kennedy, M. D.; H. H. Wheeler, M. D.; W. J. Leach, M. D., O. O. Alexander, M. D.; R. L. Sensenich, M. D.; A. F. Weyerbacher, M. D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary. Guests, George Bowman, M. D., and H. F. Beckman, M. D.

Minutes of the meeting of December 16, 1934, approved.

Purchase of $5,000 Worth of Government Bonds

The treasurer of the Association reported that he had purchased five $1,000 3-1/8% Treasury Bonds of 1946-1949.

Statement of Metropolitan Trust Company

The State Association has one $1,000 Rokeby bond. The statement showed that whereas the market value of the bonds had been about five cents on the dollar, it is now about ten cents on the dollar and that there is a chance that they may increase in value in the future.

Membership Report

Number of members on March 9, 1935	2,266
Number of members on March 9, 1934	2,257
Gain over last year	9
Number of members on December 31, 1934	2,741

1935 Meeting at Gary

Report made upon the program prepared by the Committee on Scientific Work. The following outstate speakers have been invited to take part in the program:

Ralph M. Waters, M. D., Madison, Wisc. (Accepted.)

Norman F. Miller, M. D., Ann Arbor, Mich. (Accepted.)

Louis J. Karnosh, M. D., Cleveland, Ohio. (Accepted for Wednesday morning general program and Wednesday evening banquet. Subject, "Insanities of Famous Men.")

Virgil S. Counseller, M. D., Rochester, Minn. (Accepted.)

Sanford R. Gifford, M. D., Chicago. (Accepted.)

Elexious Thompson Bell, M. D., Rochester, Minn. (Accepted.)

William F. Braash, M. D., Rochester, Minn. (Accepted.)

Louis G. Herrmann, M. D., Cincinnati, Ohio. (Accepted.)

Roy Wesley Scott, M. D., Cleveland, Ohio.

The monthly statements of Receipts and Expenditures and reports of the Budget for December, January and February for the Association committees and THE JOURNAL were made.

Legislative and Legal Matters

(1) *Court Decision on Vaccination.* Although letters have been written to physicians at Union City and although Mr. Stump has made efforts to obtain information upon the above, the headquarters office has been unable to obtain any definite word in regard to the decision as reported in the Union City paper some months ago. The Committee suggested that if Mr. Stump or the executive secretary is in Union City sometime in the future a visit should be made to the court in order to check up on this decision.

(2) *Automobile Accident Legislation.* Mr. Stump made a report upon this question. He stated that as the Governor and many of the legislators were opposed to diverting the state highway funds to pay for professional services rendered in automobile accidents, the matter was being approached from a different angle. Material has been collected from each county medical society and through the hospital association in regard to the number of cases that are treated for which no compensation is received. This material, along with a brief, has been presented to the Governor who may attempt to work this in in some way in the relief program.

a. Letter received from Lowell W. Painter, M. D., secretary of the Randolph County Medical Society, stating that the society felt that any payment received by the physicians from the state for automobile accident cases was merely another move in the direction of state medicine, brought to the attention of the Committee.

(3) *California Campaign Against Chiropractors and Naturopaths.* Letter received from Ben H. Read, executive secretary of the Public Health League of California, in regard to the campaign against the "Chiropractic and Naturopathic Initiatives" which was carried on by the Public Health League in that state. The result was the overwhelming defeat of the cultists.

(4) *Administration of Anesthetics.* Report was made to the Committee that numerous letters had been received from physicians throughout the state asking questions concerning the ruling of the State Board of Medical Registration and Examination limiting the administration of anesthetics to physicians. In each case these letters were forwarded to the State Board of Medical Registration and Examination for answer.

(5) *Ruling of the Attorney General Concerning the National Board of Examiners.* The Attorney General has given an opinion that the State Board of Medical Registration and Examination may recognize candidates who have taken the

National Board examinations. This has been done without the necessity of any legal action. If this matter is settled, a big problem has been cleared up here in Indiana without the necessity of bringing the matter before the legislature.

Indigent Sick

(1) A tentative plan prepared by Charles Marshall of the Governor's Commission on Unemployment Relief, laying down general principles to be followed locally for the care of the indigent sick, brought to the attention of the Committee. Dr. Alexander was given a copy of this tentative plan to review in order that he might make suggestions concerning the outline. Dr. F. S. Crockett of Lafayette has another copy of this tentative plan and he is to meet with the Governor's Commission on Unemployment Relief and go over the plan with FERA representatives.

(2) Numerous letters received from the various county medical societies concerning individual questions and difficulties arising from the care of the indigent sick. In each case these questions were answered and the difficulties taken up with Charles Marshall who has been delegated specially to take care of the medical questions which come up regarding the care of the indigent sick.

Sickness Insurance

(1) Statement of Rexford Tugwell which appeared in the press brought to the attention of the Committee. According to the statement, "Three-fourths of the American people cannot afford the high costs of illness and the day is near at hand when medical assistance must be provided for those who otherwise would do without or be forced to go hopelessly in debt."

(2) Special bulletin of the American Academy of Ophthalmology and Otolaryngology as a follow-up of the special session of the House of Delegates of the American Medical Association in regard to sickness insurance, brought to the attention of the Committee.

(3) Pamphlet entitled, "Sickness Insurance and the Propagandist Foundations," giving a summary of the work done by the Milbank, Rosenwald and Twentieth Century Funds, brought to the attention of the Committee.

(4) Letters received from H. C. Ragsdale, M. D., councilor of the Third District, E. A. Raincy, M. D., secretary of the Boone County Medical Society, and A. C. Rettig, M. D., secretary of the Delaware-Blackford County Medical Society, giving reports of action taken by district and local medical societies against sickness insurance brought to the attention of the Committee.

(5) *Pamphlet prepared by the Pollak Foundation for Economic Research.* This pamphlet, regarding medical economics, was prepared for the use of high school and college students in preparing debates upon the subject. The Committee felt that the citations given in the pamphlet were mostly from the side of the advocates of socialized medicine. The American Medical Association has prepared pamphlets to be distributed to students, giving the medical side and upholding the traditional form of American medicine as opposed to a system of socialized medicine.

(6) *Distribution of material to individual physicians.* The Executive Committee authorized the preparation of a short statement upon sickness insurance which is to be sent to each member of the Indiana State Medical Association. Pamphlets prepared by the American Medical Association are to be enclosed with this statement.

Transient Indigent Service

George Bowman, M. D., in charge of medical relations in connection with the Transient Indigent Service, appeared before the Committee and discussed the situation with the Committee.

Correspondence from J. M. Fleming, M. D., of Elkhart County, vigorously complaining against the principle by which the Transient Indigent Service is allowed to contract for the care of its charges on a salaried basis, brought to the attention of the Committee. Dr. Fleming stated in his letter, "It is no personal quarrel of mine with the Transient Bureau that leads me to resist the signing of a contract agreement here in Elkhart, for certainly they have been very nice to deal with, but I do feel that the principle involved so far as the medical profession at large is concerned is important and in as much as this problem of providing medical and other services for large numbers of indigent persons will unquestionably be with us for some years to come, I feel that no settlement should be accepted by the profession that would not be satisfactory on a more or less permanent basis."

Protest Against American College of Surgeons

Letter addressed to the Indiana members of the American College of Surgeons brought to the attention of the Committee. The letter states, "We cannot afford to approve the action of the Board of Regents of the American College of Surgeons in assuming functions that belong only to the American Medical Association."

A letter addressed to the American College of Surgeons states, "After due and careful consideration of the letter received from the trustees of the American College of Surgeons October 30, 1934, signed by Dr. Crile, in answer to the protest of the Indiana members against the action taken by the trustees in respect to health insurance, we, the Indiana members, do not consider our protest to have been satisfactorily or adequately answered. . . . The members of the College of Surgeons are members of the American Medical Association, and, as such, should be and must be governed by that body in all matters pertaining to ethics and economics. . . . We respectfully ask that the American College of Surgeons confine its efforts to the advancement of surgery and the science of surgery, leaving the subjects of ethics, economics, and all allied questions to the American Medical Association to which body they rightfully belong.

Optical Retail Trade Code

Oculists in Indiana have been asked by the Code Authority to pay an assessment of $3.00 for the support of the Optical Retail Trade Code Authority. A protest against this payment on the part of physicians has been made by the American Medical Association. The American Medical Association recommends that "Pending the adjustment of these protests, physicians who are engaged in strictly professional work are advised to refrain from answering the questionnaire that the Optical Retail Trade Code Authority has sent to them and to refrain from paying the attempted assessment for the support of that Code Authority."

The letter from the American Medical Association further states: "A person who on his *own account commercially buys and sells* eyeglasses and spectacles and makes a *commercial* profit on the transaction is presumably within the purview of the Optical Retail Trade Code, even though he happens to be a physician. It is believed, however, that a physician who buys and sells eyeglasses and spectacles *only as the agent of patients for whom he prescribes them and without making any commercial profit on the transaction* is not within the terms of that code. The fact that a physician charges for his *professional* services in prescribing and fitting glasses and spectacles does not alter the situation."

Federally Appointed Physicians in Extension Work in Agriculture and Home Economics in Indiana

A letter dated October 18, 1932, signed by T. A. Coleman, assistant director of extension work in agriculture and home economics in Indiana, brought to the attention of the Executive Committee to show that the government has been for a number of years engaged in certain practices of state medicine. The letter states, "The federal rules provide that where a federally appointed physician is available he must be used, in which case it seems he files the bill and collects directly from the federal government, thus relieving this office (Indiana office) and yourself of that responsibility. May I urge, therefore, that you have your office assistant and members of your family fully advised as to names of federally appointed physicians to be called in case of an accident while in the performance of your official duties?" This letter was sent to all members of the extension staff and gave the list of physicians in the state who had been federally appointed.

Cancer Prevention Program of Indiana Federation of Clubs

Letter from Mrs. Robert A. Hicks, president of the Indiana Federation of Women's Clubs, brought to the attention of the Committee. This letter states that the Indiana Federation, following the lead of the American Federation, has adopted the prevention and control of cancer as a principal objective of the

Federation and that a state-wide educational program has been planned in order to give the public the newer knowledge of cancer, to enlist public support and cooperation to lessen the number of cases of deaths from cancer, and to create public opinion which would help the medical profession to provide the necessary teaching, diagnostic and hospital facilities for the effective treatment and control of cancer. The letter goes on to say, "It is essential that such a program have the full confidence, approval and support of the medical profession. It will be our purpose to present the plan of the proposed program and all activities in connection with the program to the designated representatives of the State Medical Association for approval, and to work in close cooperation with the Association." The Executive Committee instructed the secretary to answer this letter, expressing the appreciation of the Association to the State Federation of Clubs and stating that it will be most pleased to receive the plan of the proposed program whenever the Federation has such a program prepared. The Committee also instructed the secretary to inform the Federation that the Federation would have the hearty support of the Indiana State Medical Association in its cancer educational program.

Open Solicitation of Business by Clinic

Circular letter sent out to physicians in the northern part of the state brought to the attention of the Committee. The Committee instructed the secretary to forward this letter to the councilor for the district, stating that this seemed to the Committee to be an open solicitation of business. The councilor was asked to make an investigation into this matter and take the matter up with the officers of the County Medical Society.

Invitation to Second District Meeting June 19, 1935, Vincennes

Invitation received from C. L. Boyd, M. D., asking the officers of the State Association to attend the meeting of the Second District Medical Society on June 19, 1935. There will be a noon luncheon and evening meeting.

Suggestion in regard to High School Essays

Suggestion made by George V. Cring, M. D., Portland, that the State Association sponsor a high school essay contest on "Choosing Your Family Physician." The Committee desired to take this matter under consideration and bring it up for discussion at its next meeting.

National Underwriters' Bureau of Kansas City

Letter received from R. G. Leland, M. D., director of the Bureau of Medical Economics of the American Medical Association, saying that he has no knowledge of the endorsement of the National Underwriters' Bureau of Kansas City by a group of insurance companies. Agents of this organization have been soliciting physicians to have their names printed in a directory, to be used by insurance companies in selecting their doctors, at $10.00 a name. Dr. Leland writes, "It is of course possible that some companies may have given the Bureau some kind of support, but information that I was able to secure some time ago was to the effect that insurance companies could find an abundance of physicians for their purposes without resorting to any insurance medical directory, such as that published by the Underwriters' Bureau. Personally, I am unable to understand why physicians should pay from $10 to $75 for an insurance medical directory listing without any guarantee that they are to secure work that will even reimburse them for this listing charge."

Membership Dues of Dr. N. E. Gobbel, English, Indiana

A check for $7.00, State Association dues for Dr. Gobbel for 1935, has been received at the headquarters office, as the Crawford County Medical Society is inactive. The Executive Committee ruled that it could not receive Dr. Gobbel's dues direct and that the secretary should write a letter to the councilor of the district stating that this society would have to organize, elect a secretary and be prepared to receive the dues from the individual physicians in the county or turn in its charter.

A Plea for Paid Organization Workers

Dr. H. F. Beckman of Indianapolis appeared before the Committee and stated that it was his firm belief that instead of having volunteer workers to carry on medical organization activities throughout the state the funds of the State Association should be used to pay physicians who would devote their entire time to medical organization work. The Committee expressed itself as appreciating the suggestions of Dr. Beckman and instructed the secretary to write a note of appreciation to him.

Fourth Annual Graduate Educational Meeting

This meeting is to be held at Evansville. The Committee on Graduate Education is to meet and arrange details for the meeting within the next two weeks.

The Journal

Budgeting of JOURNAL funds.

(a) In accord with the action of the Council THE JOURNAL was budgeted enough funds for 1935 to allow it to print at least one hundred more reading pages in 1935 than in 1934.

(b) Albert Stump is to make a report at the next meeting of the Executive Committee as to the legal manner in which THE JOURNAL and the Association funds are to be apportioned.

Elimination of advertising from the front page. Mead Johnson and Company agreed to accept a full page of advertising in a run-of-JOURNAL position instead of the half page on the front cover. The Executive Committee instructed the managing editor to write to Mead Johnson and Company expressing appreciation for cooperation in changing the position of its advertising so that there will be no advertising on the front page of THE JOURNAL.

The Executive Committee authorized the publication of an editorial of encouragement in THE JOURNAL in regard to the *Annals of Medical History*. This editorial is to urge the individual physicians to become subscribers to the *Annals* which was founded by Sir William Osler. Unless some backing is received from the profession "the *Annals* is faced with the unpleasant possibility that it may have to suspend publication."

Malpractice

(1) Questionnaires in regard to attorney services in other states. This material is to be held for future reference of the Committee.

INDIANA STATE MEDICAL ASSOCIATION
BUREAU OF PUBLICITY

January 29, 1935.

Meeting called to order at 3:30 p. m.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D., J. H. Stygall, M. D., and T. A. Hendricks, executive secretary.

Release, "Sinus Trouble," read. The Bureau suggested several corrections to be made in this release before it is published.

Report on medical meeting:

January 11—Woman's Auxiliary to the Wayne County (Michigan) Medical Society, Detroit, Michigan. "A common Sense Health Program." 300 present.

Numerous letters in regard to radio broadcasting rules of other state medical societies received by the Bureau. A summary of these letters which will show the attitude of the various societies in regard to this subject is to be prepared for the next meeting of the Bureau.

Articles received from the United States Public Health Service given to a member of the Bureau for review.

Copy of letter written by a county medical society secretary to a physician whose name was used in a questionable newspaper article and reply of the physician read by the Bureau. The Bureau deprecated this publicity and referred the entire matter to the council of the local medical society under whose jurisdiction this physician comes for any action it deems proper.

Report of the tuberculosis committee of the publicity committee of the Indiana State Medical Association brought to the attention of the Bureau. The Bureau of Publicity gave its approval to this splendid report with the proviso that in its opinion the question of x-ray examinations needs to be very carefully and conservatively undertaken.

A number of newspaper clippings were reviewed by the Bureau.

March 21, 1935.

Meeting called to order at 3:30 p. m.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D., J. H. Stygall, M. D., and T. A. Hendricks, executive secretary.

Release in regard to diphtheria immunization suggested for May Day.

Requests for speakers:

March 20—Parke-Vermillion County Medical Society, Clinton, Ind. Speaker requested to talk on "Fractures." Speaker obtained.

March 20—Decatur County Medical Society, Greensburg, Ind. Speaker obtained.

Article, "Good and Bad Fatigue," in the *Indiana Parent-Teacher* brought to the attention of the Bureau.

The Bureau release entitled, "So-Called Cancer Cures," which was printed in the *Hoosier Health Herald*, the official publication of the Indiana Tuberculosis Association, brought to the attention of the Bureau.

The Bureau authorized the subscription to *Survey Graphic* for six months.

A report on the thirty-first Annual Congress on Medical Education, Hospitals and Licensure, which was held in Chicago on February 18 and 19, 1935, was made by the member of the Bureau who represented the State Association at this conference. This report was published in the April number of THE JOURNAL.

The following matters in regard to the tuberculosis campaign were taken up and discussed by the Bureau:

(1) The following letter from the secretary of the Miami County Medical Society in regard to the campaign in that locality:

"To the Members of the Miami County Medical Society:

"Dear Doctor:

"The society has not yet sponsored the promiscuous testing of all children of the county for T. B. but has asked for literature from different sources on the subject which will be presented at the next meeting and a decision reached.

"In the meantime the Health Committee has decided that in the districts where people want the M. A. test given the physician of that particular locality shall be his own judge and do as he thinks best. One thing was decided, which is as follows:

"In giving this test or any others no member of the society shall be expected to, nor shall he give tests free to other than indigents and the doctor shall be the sole judge as to who is indigent and shall receive treatment free, and who shall pay for services rendered.

"This was taken up with the state authorities and was referred back as correct, also that all health activities must be taken up through the society in order that same may be uniform and that the most good may come from them.

"Kindly inform and insist to your parent teacher organizations that the society will furnish a speaker any time at any meeting for health talks and that we are anxious to supply same."

The Bureau approved this letter and requested the secretary to write to the society asking it to keep the Bureau informed in regard to this matter.

(2) Resolutions passed by the Radiological Society of New Jersey with special regard to the use of paper film instead of the celluloid film in taking x-rays.

(3) Resolutions passed by the Indiana Roentgen Society February 22, 1935.

The Bureau recommended the publication of these resolutions in THE JOURNAL of the State Association.

The Bureau recommended that a letter be written to the chairman of the health committee of the Indianapolis Medical Society and also to the chairman of the state committee, stating that the Bureau of Publicity had sponsored a resolution that had passed the House of Delegates calling for a tuberculosis campaign and was responsible to the House of Delegates for a report upon such a campaign. Hence, the Bureau requests a report of progress from the committees which are responsible for carrying out such a campaign.

Publicity prepared by other state societies in regard to sickness insurance was brought to the attention of the Bureau. One member of the Bureau was assigned to make a study of this publicity and make a report to the next meeting of the Bureau.

A compilation of information on radio broadcasting rules and regulations in other state societies was brought to the attention of the Bureau. This information was gained from the questionnaire which was sent to each of the various state societies.

Questionnaire from the Mid-West Physical Education Association brought to the attention of the Bureau. This questionnaire was assigned to one member to study and to report upon at the next meeting of the Bureau.

Letter received from the National Society for the Prevention of Blindness, enclosing a pamphlet entitled "Community Enterprise in Preventing Blindness." was assigned to a member of the Bureau for review.

Article in the Better Business Bureau Bulletin in regard to the injunction against the Dr. Ritholz Optical Company brought to the attention of the Bureau. This company was prohibited by federal court order from the use of misleading or deceptive advertising, such as "Free Examination of Eyes," "Free Consultation," etc.

An outline of a survey to be made in regard to the obstetrical situation in Indiana was to be presented to the Bureau by the chairman of the state committee on puerperal mortality. The Bureau suggested that the chairman be asked once again to present his material.

A member of the Bureau reviewed the book by Howard W. Haggard, associate professor of Applied Physiology at Yale University, entitled, "The Doctor in History." This review is printed in this issue of THE JOURNAL of the Indiana State Medical Association.

Letter received from a registered nurse at Larchmont, New York, who requested that the Bureau send her releases. The letter reads as follows:

"I find the material very interesting and helpful in my work and greatly appreciate having my name on your mailing list."

Request received from the Arkansas Medical Society to be put on the mailing list.

Request received from a physician to be placed on the speakers' list.

INDIANA DIVISION OF PUBLIC HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report, March, 1935

Diseases	Mar. 1935	Feb. 1935	Jan. 1935	Mar. 1934	Mar. 1933
Tuberculosis	173	121	84	124	179
Chickenpox	721	526	529	375	700
Measles	2,764	2,107	1,744	3,803	393
Scarlet fever	1,042	1,067	793	1,599	708
Smallpox	4	14	10	7	9
Typhoid fever	7	5	12	14	7
Whooping cough	202	150	174	299	130
Diphtheria	94	152	202	83	121
Influenza	277	413	687	202	334
Pneumonia	97	133	109	49	43
Mumps	114	69	32	79	284
Poliomyelitis	1	2	0	1	1
Meningitis	19	12	5	8	24
Undulant fever	4	0	0	0	0
Encephalitis	4	1	3	0	0
Septic sore throat	1	0	0	0	0

THIRD DISTRICT MEDICAL SOCIETY

The Third District Medical Society met in special session at New Albany, Indiana, March 17, 1935. This was the second special meeting held in the Third District, to discuss economic questions and sickness insurance, and the best method of informing the public of what sickness insurance is and how it is likely to affect them.

A suggestion was offered and adopted, "That every doctor write to his patients a letter explaining sickness insurance, and if not approved by them to write or wire their senator asking him to cast his vote against the measure."

Another suggestion was offered and voted on that the Executive Secretary of the State Association inform every county secretary when the sickness insurance bill comes

up in the senate, and for every county society and as many doctors as so desire, send a telegram to our senators on the same day and as near the same time as possible, asking them to vote against the measure.

The action of this meeting is to be published in *The Journal of the Indiana State Medical Association.*

P. H. SCHOEN, M. D.,
Secretary.

INDIANA ACADEMY OF OPHTHALMOLOGY AND OTO-LARYNGOLOGY

The Indiana Academy of Ophthalmology and Oto-Laryngology held its annual meeting at the Claypool Hotel, Indianapolis, April 10, 1935.

At the afternoon session, Dr. George E. Shambaugh, Jr., of Chicago, read a paper on "The Significance of Diplacusis in Meniere's Syndrome."

Dr. Thomas D. Allen, of Chicago, addressed the Academy at the evening banquet; his subject, "Standards."

At the business session the Academy voted that, beginning January, 1936, all applicants for membership must be certified by either the American Board of Oto-Laryngology or the American Board of Ophthalmology.

The following officers were elected for next year: President, J. R. Dillinger, M. D., French Lick; first vice-president, E. E. Holland, M. D., Richmond; second vice-president, W. R. Hickman, M. D., Logansport; secretary-treasurer, Frederick V. Overman, M. D., Indianapolis, re-elected. Elected to Council, F. McK. Ruby, M. D., Union City, and O. G. Brubaker, M. D., North Manchester.

The 1936 meeting will be held in Martinsville.

BOOK REVIEWS

BOOKS RECEIVED

MODERN MOTHERHOOD. By Claude Edwin Heaton, M. D., with introduction by Hazel Corbin, director of Maternity Center Association, New York. 271 pages; cloth. Price $2.00. Farrar and Rinehart, Inc., New York, 1935.

* * *

THE HARVEY LECTURES. Delivered under the auspices of the Harvey Society of New York, 1933-1934, under the patronage of the New York Academy of Medicine. Series XXIX. 262 pages. Cloth. Price $4.00. The Williams and Wilkins Company, Baltimore, 1935.

* * *

FAILURE OF THE CIRCULATION. By Tinsley Randolph Harrison, M. D., Associate Professor of Medicine, Vanderbilt University School of Medicine. 396 pages. Cloth. Price $4.50. The Williams and Wilkins Company, Baltimore, 1935.

* * *

SURGICAL PATHOLOGY OF THE PERITONEUM. By Arthur E. Hertzler, M. D., Surgeon to the Agnes Hertzler Memorial Hospital, Halstead, Kansas, and Professor of Surgery, University of Kansas. 304 pages, with 201 illustrations. Cloth. Price $5.00. J. B. Lippincott Company, Philadelphia and London, 1935.

* * *

NAMES OF SURGICAL OPERATIONS. Compiled and arranged by the Western Surgical Association through its Special Committee. Edited by Carl E. Black, A. M., M. D., Jacksonville, Illinois. 102 pages. Cloth. Price $3.00. Bruce Publishing Company, Saint Paul, Minnesota, 1935.

* * *

THE MODERN METHOD OF BIRTH CONTROL. By Thurston S. Welton, M. D., F. A. C. S., Editor of the *American Journal of Surgery.* 168 pages. Cloth. Price $3.00. Walter J. Black, Inc., New York, 1935.

USEFUL DRUGS. A List of Drugs Selected to Supply the Demand for a Less Extensive Materia Medica with a Brief Discussion of their Actions, Uses and Dosage. Prepared under the direction and supervision of the Council of Pharmacy and Chemistry of the American Medical Association. Edited by Robert A. Hatcher, Ph. M., Sc. D., M. D., and Cary Eggleston, M. D. Ninth Edition. 203 pages. Cloth. Price $.60. American Medical Association, Chicago, 1935.

* * *

METHODS OF TREATMENT. By Logan Clendening, M. D., clinical professor of medicine, Medical Department of the University of Kansas; attending physician, Kansas City General Hospital; physician to St. Luke's Hospital, Kansas City, Mo. With chapters on special subjects by H. C. Anderson, M. D.; Ursulla Brunner, R. N.; J. B. Cowherd, M. D.; Paul Gempel, M. D.; H. P. Kuhn, M. D.; Carol O. Rickter, M. G.; F. C. Neff, M. D.; E. H. Skinner, M. D.; E. R. DeWeese, M. D.; and O. R. Withers, M. D. Fifth edition. 879 pages, illustrated. Cloth. Price $10.00. C. V. Mosby Company, St. Louis, 1935.

* * *

PHYSICAL DIAGNOSIS. By Warren P. Elmer, M. D., Associate Professor of Clinical Medicine, Washington University School of Medicine; and W. D. Rose, M. D., late Associate Professor of Medicine in the University of Arkansas. Seventh edition. 919 pages with 342 illustrations. Cloth. Price $8.00. C. V. Mosby Company, St. Louis, 1935.

* * *

DISEASES OF THE SKIN. By Richard L. Sutton, M. D., Sc. D., LL. D., F. R. S. (Edin.); Professor of Dermatology, University of Kansas, School of Medicine; and Richard L. Sutton, Jr., A. M., M. D., L. R. C. P. (Edin.), Assistant in Dermatology, University of Kansas, School of Medicine. Ninth edition, revised and enlarged. 1,433 pages with 1,310 illustrations and 11 colored plates. Cloth. Price $12.50. The C. V. Mosby Company, St. Louis, 1935.

* * *

PHYSIOLOGY IN MODERN MEDICINE. By J. J. R. Macleod, M. B., LL. D., D. Sc., F. R. C. P., F. R. S., Regius Professor of Physiology in the University of Aberdeen, Scotland; formerly Professor of Physiology in the University of Toronto, Canada, and in the Western Reserve University, Cleveland, Ohio. Assisted by Philip Bard, M. D.; Edward P. Carter, M. D.; J. M. C. Olmsted, M. D.; J. M. Peterson, M. D.; and N. B. Taylor, M. D. Seventh edition. 1,154 pages with 297 illustrations, including 7 plates in colors. Cloth. Price $8.50. C. V. Mosby Company, St. Louis, 1935.

BOOKS REVIEWED

TREATMENT BY DIET. By Clifford J. Barborka, M. D., Department of Medicine, Northwestern University Medical School, Chicago. 615 pages, illustrated. Cloth. Price $5.00. J. B. Lippincott Company, Philadelphia and London, 1934.

This book gives very practical and concise methods of applying diet therapy to health and disease. Lengthy details of theories are omitted and for this reason this book should be especially useful for physicians and dietitians to use in instructing patients.

The emphasis placed upon the nature of the disease, object of the diet, and the dietary principles involved in the treatment of diseases is especially good. The chapters on dental caries, and the use of the ketogenic diet for diseases other than epilepsy, such as migraine, asthma, and chronic urinary infection, make valuable additions to the book.

This reviewer would prefer to have the bibliography placed at the end of each chapter rather than in the appendix.

A TEXTBOOK OF SURGERY. For Students and Physicians. By W. Wayne Babcock, A.M., M.D., LL.D., F.A.C.S., Professor of Surgery and of Clinical Surgery in The Temple University; chief of the Surgical Service, U. S. General Hospital No. 6, 1917-1919. Second edition, rewritten, with 1,032 illustrations and 8 plates in color. 1,312 pages. Cloth. $10.00. W. B. Saunders Company, Philadelphia and London, 1935.

The second edition of W. Wayne Babcock's "Textbook of Surgery" has much to recommend it to the student, the internist and the surgeon. Many chapters have been rewritten and all have been revised. The book is divided into four parts as follows: I General Surgery; II The Surgery of Systems; III Surgical Technic; and, IV Regional Surgery.

The author's style is excellent. His statements are short, terse and to the point. In general he follows the usual pedagogical method of presenting his subject matter under the headings of definition, brief historical background, etiology, pathology, symptoms and signs, diagnosis, prognosis, and treatment. This gives the book a more definite organization than some texts wherein the author covers the subject matter well but in a haphazard fashion. A feature of the book is the plan of presenting surgical pathology by diagram as well as by photograph. All illustrations are clear, well-labelled, and well chosen.

In the first part, Chapter I deals with "General Considerations." All physicians, particularly surgeons, should read this brief chapter. The following excerpt will illustrate the author's philosophy concerning the art and science of surgery.

Surgical art, by speed and facility in operating, may be spectacular and brilliant, as in the case of Ferguson or Joseph Pancoast; or by meticulous attention to science and detail, although time consuming and without dash, be of the highest order, as in the case of Kocher or Halsted. Speedy, spectacular, thrillingly dextrous operative work can never compensate for a lack of science in surgery. The highest art is the protection of the patient and of his tissues. This is shown by the selection of the best procedure that the patient can then endure, by delicacy and skill in manipulation of the tissues, by the absence of bruising, crushing, or laceration, by the conservation of blood and body heat, by the protection of nerves, blood vessels, and other important structures, and by the avoidance of strangulating constriction in the closing of wounds. Embracing and guiding all science and skill there must be an uprightness of character that will lift an honorable profession far above the sphere of commerce and trade. A surgeon will ever first be actuated by the welfare of his patient. He will study to protect those entrusted to his care from unnecessary operation or mutilation. He will accept the greater difficulty and burden in his work if it is for the welfare of those he serves. He will esteem relief from suffering and disability as his greatest reward. He will not degrade himself or his caling by offering gratuity or commission for patients, or by bartering with those who would commercialize medicine."

Chapter VIII is devoted to shock, coma, and delirium. The chapter on Thyroid Disease is splendidly illustrated and well considered. In Part IV, Chapter XLII deals with the mammary gland. This discussion includes the recent work of Lewis and Geschicter, Cutler and others on chronic cystic mastitis and its relationship to the follicular or more recently, the lactating hormone.

The colored illustrations of appendicitis with peritonitis are beautiful examples of how an artist may help a medical author portray pathological conditions. Some may say that the author is rather dogmatic in some of his statements. This is not a valid objection because the reader seeks not only the general opinion concerning a particular subject but more especially the author's preference. Perhaps Babcock does not stress his own methods and conceptions often enough. Certainly one cannot review this book without concluding that the author is an astute and able surgical teacher.

THE DOCTOR IN HISTORY. By Howard W. Haggard, M. D., Associate Professor of Applied Physiology in Yale University. Author of "Devils, Drugs, and Doctors," etc. 408 pages. Cloth. Price $3.75. Yale University Press, New Haven, Connecticut, 1934.

This book traces the progress of medicine from the earliest medical records and is written in a very entertaining manner. It is interesting both for the physician and the layman. Its perusal by all physicians is recommended and it should be widely read by the laity to understand the development of medical science from ancient times. The author takes up all of the great characters in medicine including Hippocrates, Galen, Paracelsus, Andreas Vesalius, Ambroise Paré, John Hunter, Harvey, Lister, Pasteur, and many others.

* * *

THE NERVOUS PATIENT. By Charles Phillips Emerson, M. D., Research Professor of Medicine, Indiana University, Indianapolis. 453 pages. Cloth. Price $4.00. J. B. Lippincott Company, Philadelphia and London, 1935.

The subtitle offered for this work is "A Frontier of Internal Medicine." Sticking closely to this subject there is an appeal for the general practitioner to detect particularly among the "well" children evidences of what later may become a neuropathological or psycho-pathological picture. Adults are also considered and the author states that for each patient who visits the general practitioner for symptoms which definitely indicate organic diseases there are at least two other patients who complain of "nervousness."

It is to be regretted that the 30 chapters could not be placed in two volumes with larger print and a better grade of paper for reading purposes. No doubt the author and publisher have tried to make the price of the book commensurate with the times. Certainly it is in the price range of all.

The vastness of subjects and their diversities naturally make a sequence classification almost impossible. There is privided, however, in the running text ready page references of correlated subject material appearing elsewhere in the book. This feature plus the table of contents and the index places the publication in a position of encyclopedic importance.

Regardless of the purposes of the book it will lend itself very readily to a useful place on the desks of all physicians including the neurologists and psychiatrists. Furthermore, the splendid choice of words and the displayed readability lends the publication well for use of educated laymen, particularly those interested in physiology and psychology.

Driven by a desire to produce a volume of practical importance, the author has disregarded the old customs of presenting neurology from the distinct departments of embryology, anatomy, and physiology. His interpretations of the patient as a whole, the consideration of reactions from the standpoint of health and disease, all would lead one to say that he has well portrayed humanity on sick parade not only from the academic but also from the sociologic points of view. The logic used is sufficiently elastic to make the book one of longevity.

There are careful discussions of mental patterns, psychological mechanisms, and hereditary and environmental influences. No small amount of discussion is allotted to that partly understood tie-up between the entire nervous system, the endocrines, blood chemistry, allergy, the reticulo-endothelial system, the thallimus, and the dominant emotions. There is regional consideration of signs and symptoms. There is also a discussion in several chapters from the standpoint of bodily systems including the respiratory, circulatory, digestive, genito-urinary, skeletal, and neuro-muscular.

Several chapters are devoted to those conduct disorders involving sleep, sex life, and other personality disintegrations. Although the ramarks in these particulars are general, the author weighs carefully each word, no doubt for the purposes of laying out an objective calm to help the physician not psychiatrically trained from false conclusions in certain confused conditions. This will be a help to the nervous patient who is thrown so often into a system of 'Pollyannic Therapeutics.' Although not maligned, "psychogenic causes" as a scapegoat for many diagnosticians are discussed with warning.

(Continued on page xix)

BOOK REVIEWS—Continued

There is a direct and indirect plea for the readers not to forget the teachings of Pavlov and be too much imhibed by Mesmer.

The author's crusade against ignorance will aid in the approaching campaign for a better understanding of the neglected nervous patient. Through the book one can see the results of his many years' clinical experience in internal medicine. Certainly this work will serve a double purpose. On the one hand it will be an aid to the patient; on the other hand it will help lead the gullible neurotic into the doctors' offices for their psychological potions based on understanding rather than into the hands of the charlatan.

* * *

STAMMERING AND ALLIED DISORDERS. C. S. Bluemel, A. M., M. D. 182 pages. Cloth. Price $2.00. MacMillan Company, New York, 1935.

There are two definite schools of speech pathologists, one leaning toward the side of alleged confusion between right- and left-handedness, and the other leaning toward the emotional theory; this is a book discussing both sides of the question. The author tends to give a broader conception of the subject and tries to harmonize the conflicting points. No doubt, as in all medical symptomatology, there are cases where one point of view can well be applied and other cases where the opposite point of view is practical.

For a small volume this book can be recommended as a usable reference.

* * *

SCULPTURE IN THE LIVING. By Jacques W. Maliniak, M. D., formerly Major, Reconstruction Hospital, Allied Armies, etc. Foreword by Wendell C. Phillips, M. D. 203 pages, illustrated. Cloth. Price $3.00. The Lancet Press, New York, 1934.

This is a book which any physician may read with profit. Though it is chiefly non-technical, it should have an especial appeal to anyone interested in plastic surgery. The book is well written and discusses in understandable terms the many phases of plastic surgery, giving in a practical fashion the indications and contra-indications for surgical reconstruction of cosmetic defects and deformities. If the general public could have access to the information contained in this book, there would be little patronage left for the so-called "beauty doctors" and cosmetic quacks who now prey upon their many unfortunate and uninformed victims.

As Dr. Wendell C. Phillips, former president of the American Medical Association, has said, "Dr. Maliniak's book on plastic surgery is destined to meet a real need in the medical world. Physicians who are privileged to read and absorb its contents will be better able to advise and counsel the layman who rarely knows where to turn for the safe eradication of deformities that have an important influence on happiness and success in life." Furthermore the book contains valuable information for the social worker, the nurse, the medical student, the jurist, or any other person who may wish to understand the scope of plastic surgery as well as the qualifications and special training which the plastic surgeon should possess. The book presents an accurate survey of the field of reconstructive surgery in its many phases, with a viewpoint purely educational.

* * *

MINOR SURGERY IN GENERAL PRACTICE. By W. Travis Gibb, M. D., consulting surgeon, City Hospital and Central and Neurological Hospitals, New York. 429 pages, illustrated. Cloth. Paul B. Hoeber, Inc., New York, 1934.

This book does not add much to the present number of texts of the same kind. In the author's introduction he states that he limits his treatise on Minor Surgery to those cases which a physician can attend in his own office or at the patient's home with the instruments and dressings usually carried in his hand bag. This is an excellent description of what Minor Surgery should cover.

There are some statements which are inaccurate and would confuse one who read the text. The author states, in chapter nine, that "Inflammation and infection are synonymous terms." There are some other references to pathology which do not

(Continued on page xx)

PROFESSIONAL PROTECTION

SINCE 1899 SPECIALIZED SERVICE

A DOCTOR SAYS—

"The Medical Protective Co. has always lived up to its agreement, and has been a great comfort to me in my practice for almost 25 years."

THE MEDICAL PROTECTIVE COMPANY
OF FORT WAYNE, INDIANA
WHEATON, ILLINOIS



PHYSICIANS' BAGS
COWHIDE
$7.98 and up
Gold Lettered

Buy from a Leather Store and Save

GAUSEPOHL TRUNK CO.
51 Monument Circle --- Indianapolis

Important *to Your* **Babies!**

ACCEPTED by the AMERICAN MEDICAL ASSN. Committee on Foods



Larsen "Freshlike" Strained Vegetables are first quality garden fresh vegetables cooked, strained and sealed under vacuum to protect vitamins and mineral salts. For further protection we seal in special enamel lined cans.

All Varieties 10c Per Can

LARSEN'S *"Freshlike"* Strained Vegetables

THE LARSEN COMPANY, Green Bay, Wis.

For the CARDIAC PATIENT

●In angina pectoris the severe pain, the sense of constriction, air hunger, and the fear of impending death demand immediate relief.

The Council-accepted Aminophyllin (Searle) brings relief, aids in preventing the paroxysms and pain associated with angina pectoris, coronary sclerosis, coronary thrombosis.



By tending to exercise a vaso-dilating effect on the coronary arteries, Aminophyllin provides a valuable prophylactic agent for use over an extended period—helps to prevent recurrence of attacks.

Aminophyllin (Searle) reduces edema of cardiac origin, diminishes congestion, relieves dyspnoea—used intravenously, exerts a strong, dependable diuretic action.

Aminophyllin (Searle) is strictly an American product—made in America from American materials.

Your specifications of "Aminophyllin (Searle)" insures you of the benefits of a dependable product which is passed by the Council on Pharmacy & Chemistry of the American Medical Association.

AMINOPHYLLIN (SEARLE)

PURITY AND ACCURACY S SEARLE

Supplied in 1½ gr. tablets for oral administration; in powder (½ oz. bottles) for retention enemas and prescription compounding; 2-cc. ampuls for intramuscular use; 10-cc. ampuls for intravenous injection.

Samples and Literature on Request

G. D. Searle & Co.

FINE PHARMACEUTICALS SINCE 1888

CHICAGO

LOS ANGELES KANSAS CITY SPOKANE

BOOK REVIEWS—Continued

follow present ideas. It is further stated that, "An ordinary accidental wound is prone to become infected by the secretions of the patient's skin," etc. This, we know, may be due to organisms in suspension and not to secretion. The author also states, "If the tissues in which the infection occurs are loose and not under tension the collection of infective secretion will not be evidenced by the usual symptoms of swelling, redness and pain, but will present signs of fluctuation with few other symptoms." We are taught that the symptoms of swelling, redness, pain, and disability are all cardinal symptoms which are associated with inflammation whether it be of bacterial origin or not. He states, "Papillomata are produnculated fibrous tumors found in the cheek and if large may interfere with mastication by getting between the jaws." Commonly papillomata are concerned with the epithelial papilla and the fibrous tissue represented in them are of secondary importance.

These are some of the inaccuracies found, but aside from this, the illustrations and descriptions of surgical technic make the book a useful one in general. It is probable, however, that this or any author would find it difficult to add to the literature on minor surgery.

PUBLISHER'S STATEMENT OF CIRCULATION

This is to certify that the average circulation per issue of *The Journal of the Indiana State Medical Association* for the six months' period ending December 31, 1934, was as follows:

Copies sold 3,045
Copies distributed free..... 190
Total 3,245

(Signed) THOMAS A. HENDRICKS, *Mng. Editor.*

Subscribed and sworn before me on this 20th day of April, 1935.

DOROTHY TERRELL, *Notary Public.*

ROUTES TO EVANSVILLE

From: Railroads		State Highways
Gary—$10.58 one way		
Lv. Gary	6.35 p. m.	State Road No. 41
via Penn.		285 miles
Ar. Chicago	7:15 p. m.	
Lv. Chicago	11:25 p. m.	
Ar. Evansville	6:00 a. m.	
South Bend—$10.52 one way		
Lv. South Bend	8:10 p. m.	No. 31 to Indianapolis
via N. Y. C.		No. 40 to Terre Haute
Ar. Chicago	9:30 p. m.	No. 41 to Evansville
Lv. Chicago	11:25 p. m.	315 miles
via C. & E. I.		
Ar. Evansville	6:00 a. m.	
Fort Wayne—$10.41 one way		
Lv. Ft. Wayne	4:10 p. m.	No. 24 to Huntington
via Penn.		No. 9 to Anderson
Ar. Chicago	7:15 p. m.	No. 67 to Indianapolis
Lv. Chicago	11:25 p. m.	No. 40 to Terre Haute
via C. & E. I.		No. 41 to Evansville
Ar. Evansville	6:00 a. m.	297 miles
Muncie—$8.06 one way		
Lv. Muncie	10:25 a. m.	No. 67 to Indianapplis
via Big Four		No. 40 to Terre Haute
Ar. Terre Haute	1:00 p. m.	No. 41 to Evansville
Lv. Terre Haute	3:20 p m.	233 miles
via C. & E. I.		
Ar. Evansville	6:20 p. m.	
Indianapolis—$5.79 one way		
Lv. Indianapolis	12:35 a. m.	No. 40 to Terre Haute
via Big Four		No. 41 to Evansville
Ar. Evansville	7:35 a. m.	178 miles
or		
Lv. Indianapolis	11:12 a. m.	
via Penn.		
Ar. Terre Haute	12:49 p. m.	
Lv. Terre Haute	3:20 p. m.	
via C. & E. I.		
Ar. Evansville	6:20 p. m.	
Richmond—$8:56 one way		
Lv. Richmond	9:48 a. m.	No. 40 to Terre Haute
via Penn.		No. 41 to Evansville
Ar. Terre Haute	12:49 p. m.	246 miles
Lv. Terre Haute	3:20 p. m.	
via C. & E. I.		
Ar. Evansville	6:20 p. m.	
Terre Haute—$3.95 one way		
Lv. Terre Haute	3:20 p. m.	No 41 to Evansville
or	6:22 p. m.	112 miles
Ar. Evansville	6:20 p. m.	
or	8:50 p. m.	
via C. & E. I.		

Sleeper $3.00.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

OFFICE OF PUBLICATION: 1021 Hume Mansur Bldg., INDIANAPOLIS, INDIANA

VOLUME 28 JUNE, 1935 No. 6

ORIGINAL ARTICLES

OPHTHALMOLOGIC ASPECT OF ALLERGY*

BERNARD J. LARKIN, M. D.
INDIANAPOLIS

It is now thirty-one years since the possibility of allergy being a factor in the production of diseases of the eye was first considered. Two European observers—one in France and the other in Germany—in 1903 published the results of their experiments in the injection of proteins and the production of allergic reactions in the eyes of animals. The discoveries made by Arthus[1] and by Uhlenhuth[2] received wide attention among ophthalmologists throughout Europe but apparently less interest was taken in this country, because it is not until twenty years had elapsed that we find reports concerning the allergic origin of eye diseases in American literature.

The first reports concerned vernal catarrh, and it is to the credit of those ophthalmologists practicing in the southern states that they were the first to make practical application of these newer conceptions in etiology. Fort[3] in Georgia, and Townsend[4] of Charleston, S. C., observing the seasonal incidence of vernal catarrh and its resemblance to such conditions as asthma and hay fever, by that time well established as diseases of allergic origin, began to make skin tests and to attempt to establish immunity by the methods then being employed in combating the conditions recognized as due to protein sensitization. Townsend's paper, which was presented before the 16th annual meeting of the Southern Medical Association, was very well documented and brought forward such incontestable proof of the soundness of his theory that, so far as I am aware, no one has since questioned the position he then assumed. The various authorities whom he quoted were very ably summed up as follows:

"There is a similar and peculiar chemistry of the secretion of vernal conjunctivitis and of [illegible] which peculiarity causes in asthma the [illegible] threads covered with mucin and sago-like g[illegible] of eosinophile cells, also twisted around it (Cu[illegible] man's spirals) and in vernal conjunctivitis the[illegible] a thread of similar constitution. In one case the twisted thread is due to the peculiar spiral arrangement of the finer bronchioles, which with respiration seems to cause twisting into filaments of the special secretion present. In vernal conjunctivitis, a similar thread-like or stringy formation is produced by the action of the eye-lids on a similar form of ocular secretion. A more brittle form of discharge would produce a foam in asthma, and just a discharge in vernal conjunctivitis. The point is that there is a similarity, microscopically and macroscopically, between the discharge of vernal conjunctivitis, and that of asthma and hay fever."

Following this line of reasoning, it seemed evident that since many persons are continuously exposed to the antigens which cause vernal conjunctivitis, as well as those responsible for hay fever or asthma, yet only a few develop these allergic conditions, there must have been some previous sensitization of the body by a protein introduced into the blood stream, which has brought about the formation of a precipitating antibody located in the fixed cells. As these sensitized cells are widely distributed, there must be certain locations where they suffer more exposure than in others. Such locations are the conjunctiva, the nasal mucous

* Presented before the Section on Ophthalmology and Otolaryngology at the Indianapolis session of the Indiana State Medical Association, October 10, 1934.

[1] Arthus, N. M.: Injectous repeteis de serum de cheval chez le lapin. *Comptes Rendu de las Societe de Biologie*, 1903, Vol. 55, p. 817.

[2] Uhlenhuth, P.: Zur Lehre von der Unterscheidung verschiederer Eiweissarten mit Hilfe spezifiche Sera. *Koch's Festschrift*, 1903, p. 49.

[3] Fort, A. G.: Vernal Conjunctivitis: Some Observations on Treatment. *J. Med. Assn., Georgia.* xii:101, 1923.

[4] Townsend, J. F.: Vaccine Treatment of Conjunctivitis. *Southern M. J.* xvi: 555, July, 1923.

membrane, or the mucal lining of the bronchials. Therefore, he concluded that vernal conjunctivitis is an anaphylactic condition, its predisposing factor being a cellular antibody precipitin in nature, and the exciting factor some antigen. Protection can be supplied through circulating antibodies produced by vaccines neutralizing the exciting factor existing in the blood. Clinical experience had shown him that treatment based upon the results of tests with allergens were more effective than vaccine treatment, although the last had given him quite satisfactory results.

In view of the clear cut manner in which Townsend marshalled his evidence, and produced practical demonstrations of the soundness of his theory, it is rather surprising that as late as 1931 we find Louis Lehrfeld[5] of Philadelphia tentatively putting forward precisely the same conception, which he backed up by reports of work done at the Wills Hospital, accounts of which he had first given in 1925. In determining the sensitivity of his patients, Lehrfeld used a 2% liquid extract of grasses or trees, applied by the scratch method at first, but later by the intracutaneous route. Two patients who had vernal conjunctivitis during the summer months, but no clinical symptoms during the winter, were treated in this way. Both reacted to injection into the eye, the characteristic discharge thus produced being found to contain eosinophiles. In discussion of Lehrfeld's paper, several speakers called attention to the fact that the theory that pollens were responsible for vernal catarrh, in resemblance to hay fever, was more or less invalidated by the fact that many had patients who suffered attacks of the eye disease in February before any pollen could possibly be in the air. Lehrfeld explained this by saying that continuous subjection to pollen sensitization during the time of its distribution had left the conjunctiva in condition to be sensitized by vegetated bacteria. A better explanation was soon after offered by Mills and Martin, which I shall explain further on in this paper.

Alan C. Woods[6], in his notable monograph of 1933, in discussing vernal catarrh, states: "The three main theories on the etiology of vernal catarrh are: (1) It is due to a constitutional disorder, related especially to the ductless glands—an expression of an endocrinopathy. (2) It is related to a vagotonia coupled with a suprarenal deficiency. (3) It is an allergic reaction of the conjunctiva, due to hypersensitivity and intoxication from specific allergens. The question of the allergic nature of vernal catarrh centers itself chiefly around four points. (a) Is an especial hypersensitivity of the conjunctiva possible? (b) Is there any evidence that patients with vernal catarrh show other symptoms characteristic of allergy? (c) Is there any evidence of specific hypersensitivity in patients with vernal catarrh? (d) Can the pathology of vernal catarrh be reconciled with the pathology of the known allergic reactions of the mucous membrane and skin?" Woods considers the four points in detail.

The allergic nature of other eye diseases, besides vernal conjunctivitis, soon became generally recognized. Shortly after Lehrfeld's presentation was made, Albert L. Brown[7], of Cincinnati, reported the experimental production of uveitis, reaching the following conclusions:

Ocular anaphylaxis can be produced by placing foreign protein in a rabbit's eye, and by intravenous administration after a sensitization period. Certain bacteria produced a hypersensitiveness so that after an initial period of infection has quieted, a similar manifestation can be produced by intravenous injection of the same antigen. An acute inflammation of the uvea was produced by intraocular injection of a streptococcus toxin from which the experimental animal recovered after a second injection of the same toxin had been administered ten days later.

Some time before Lehrfeld's second presentation, however, the allergic explanation had been offered for a number of eye diseases other than vernal conjunctivitis. It came to be quite generally recognized that the eye, in an individual hypersensitive to a certain antigen, is likely to develop an ocular reaction, not only when this antigen comes in direct contact with the tissues of the eye, but also if any part of the body is thus exposed. However, if the original inoculation chances to be directly into the eye, the reaction will be far more severe. During a period of three years Albert Lemoine[8], of Kansas City, saw fourteen cases of vernal catarrh, which were exacerbated during the pollinating season of certain trees, grasses, and flowers native to that region where he practiced, but subsided or disappeared altogether as soon as this season was past. Not all of the patients, however, reacted only to skin tests with these native pollens. One boy of six, who had vernal catarrh of the limbus for three years, was found hypersensitive to wheat as well as certain other grasses, and made no improvement until all wheat products were removed from his diet. With wheat rigorously excluded, even during pollinating season of these grasses when the eyes were slightly irritable, there was no return of the conjunctivitis. Another child, aged four, proved to be hypersensitive to egg yolk as well as sweet vernal grass. After the pollinating season of the grass was long past he continued to have conjunctivitis, but on the removal of egg from his diet, not only the eye condition, but asthma, from which he suffered for two years, disappeared en-

[5] Lehrfeld, Louis: Vernal Conjunctivitis. *J. Allergy.* ii:328, July, 1931. Also *Amer. J. Ophth.* viii:368, 1925.

[6] Woods, Alan C.: Allergy and Immunity in Ophthalmology. Monograph No. 1, Johns Hopkins Press, 1933.

[7] Brown, A. L.: Considerations Underyling the Experimental Production of Uveitis. *Amer. J. Ophth.* xv:19, January, 1932.

[8] Lemoine, Albert: Allergies in Ophthalmology. *Kansas Acad. Oph. and Oto-L.* xxx:198, 1925.

tirely. The patient who proved hypersensitive to ragweed found no relief until after frost ended the distribution of the pollen of this plant.

Encouraged by this success Lemoine extended his investigations to other ophthalmologic conditions. In four cases of "sore eyes" where previous attacks had left cicatrical contraction, with pannus of various degrees, and other findings typical of trachoma, all the patients were found hypersensitive to different pollens, and in some instances food as well. A farmer, aged 52, gave a history of attacks which came on regularly as soon as he began to cut corn fodder. He had attributed the "eye trouble" to dirt in the corn. Oddly enough, he did not prove sensitive to corn pollen, but was highly so to various extracts from weeds which were common to the Kansas corn fields. It was this investigator's opinion that the trachoma of these patients presented certain features—its seasonal incidence in particular—which differentiated it sharply from the usual clinical cases of the ailment. As the series of cases was so small he offered it only as a "suggestion," which might possibly, in the future, offer a partial solution of the age-old problem as the cause of trachoma.

Some work on phlyctenular and dendritic keratitis was also done by Lemoine but he was able to reach no positive conclusions. One patient was apparently hypersensitive to chocolate and another to strawberries, as in both cases the keratitis perceptibly cleared as soon as the offending protein was eliminated from his diet.[9]

Considering this rather meager clinical evidence in the light of general medical knowledge, we must turn to the general principle that disease, in its widest sense, arises not from some localized lesion, but rather from alterations in the physical and chemical reactions of the body fluids, which in turn react upon the tissues and induce changes in them, so that they become susceptible to invasion by noxious germs or otherwise toxic influences. The modern treatment of disease aims to recognize and correct the chemical reactions in time to prevent them from bringing about actual permanent alterations in physical structures and function. The tissues and fluids of the eye partake of the general nature of the other body structures. The elaborate studies of Duke-Elder[10] have shown that the intraocular fluids are closely analagous to those of the ear—perilymph and endolymph—or the cerebrospinal fluid, except that because the ocular capillaries are more impervious than those in other organs, the eye fluids, such as aqueous and vitreous humor, are practically free from celloid substances, found in considerable quantities in other body fluids.

In disease this impenetrability of the ocular capillaries is lost or greatly weakened. It is, therefore, reasonable to suppose that the effect of sensitization by specific antigens may be to decrease this resistance to penetration exercised by healthy blood vessels, with resulting pathologic conditions gaining foothold in the eye. Other investigators besides Duke-Elder have demonstrated that if the vasomotor mechanisms of the capillaries suffer any impairment because of the action of toxins or infections upon the nerves, protein substances will pass through the vessel walls. Urea, uric acid, and creatin and amino acids—products of breaking down of protein, have been demonstrated in both aqueous and vitreous under these circumstances. The only possible avenue of entrance of such substances is by way of the blood stream. Once entered, it is easy to imagine what their effect may be upon ocular function, the metabolism of the eye structures, or in distributing the osmotic pressure which preserves the normal fluid exchanges of these structures. Lacking an adequate explanation of the origin of many pathologic conditions of the eye, is it unreasonable to assume that they may be initiated by an anaphylactic reaction due to hypersensitization by food or other protein? As Mills and Martin[11] have explained it, "Allergy produces injuries of the tissues just as wounds may do, and the chemical reaction between antigen and antibody is accompanied by local inflammatory changes, the release of histamine, the injury or destruction of cells, great capillary dilation from secondary stimulation of the vasomotor system, accompanied by increased permeability of the vessel walls, and the exudation of serum whose substrate contains poisons. This sequence must occur in the eyes, as it does in other tissues, and is the probable explanation of many obscure ocular changes."

As histamine is a natural product which acts to stabilize the blood pressure, dilating the arterioles and being offset by the thyroid-suprarenal system which has a contracting effect upon these tissues, the over-production of histamine upsets the proper balance maintained in health by the vascular system. This is why we almost always find that patients suffering from allergy have a low blood pressure. Mills and Martin point out that the urticarial wheal is the direct result of the liberation of histamine "which is the cause of the secondary dilation of the entire capillary bed, with the oozing of fluid from these vessels into the dermal or other tissues wherever the urticarial phenomena may occur."

The theory of protein sensitization offers an explanation of many puzzles with which opthalmologists have struggled from the very beginning, and which remain today among the unsolved mysteries of medical science. While by no means all of the mysteries can be made plain by this single etiological conception, I feel it is not too much to expect that the relatively simple treatment of withholding these proteins which have been scientifically proved to be the basis of any particular allergic reaction,

[9] Balyiat, R. M. and Rinkel, H. J.: Episcleritis Due to Allergy. *J. A. M. A.* xcviii: 2054, June 11, 1932.

[10] Duke-Elder, W. S.: The Nature of Intraocular Fluids. London, George Peelman & Sons, 1927.

[11] Mills, L. and Martin G.: Urinary Protose in Ocular Allergy. Transactions A. M. A., Sec. Ophth., p. 83, 1932.

will do more to rid suffering humanity of some very distressing ocular ills, than all the serums and washes and instillation of drugs that have ever been thought of. This does not mean that we can abandon all other forms of treatment or that we should neglect to look for other possible etiological factors. We should, rather, look upon the establishment of a sensitization in a particular patient as merely one of a number of etiological agents which must be sought for and eliminated. The routine investigation should, however, be made a part of every physical examination in all eye cases where there is any uncertainty as to the origin of a given ailment. Further study and investigation will undoubtedly show a great many more possibilities in the desensitization of opthalmological patients. The alert clinician, whether or not he devotes his attention solely to the eyes, or takes a somewhat wider field for his province, cannot neglect this important branch of therapy, without finding himself at a loss more and more often as we progress in our understanding of the wonders and surprises medical science continually offers us.

305 Hume-Mansur Building.

DISCUSSION

E. M. SHANKLIN, M. D. (Hammond): A short time ago a member of our Association remarked that he would like to write an editorial for THE JOURNAL on the general subject of allergy. He supplemented his statement with the suggestion that some of our medical men were running wild on the subject, declaring that they were attributing about all the ills to which human flesh is heir to this source. I was inclined to agree with him, in part. I believe that it is quite true that allergy is being over-worked; too many physicians are exceedingly allergy-conscious. Therefore, it is refreshing to hear a paper, such as this presented by Dr. Larkin, since he takes a middle ground position and adheres closely to it.

The best definition of allergy that I have seen is given by Ehrlich, in the *Georgia State Medical Journal* for September, 1934, and is as follows: "Allergy may be defined as a hypersensitiveness of the body cells to one or more specific proteins, and when such proteins come into contact with a sensitized cell, it manifests itself in one of the allergic diseases." Ehrlich further states that allergic disease is not directly inherited, but that it is inherited according to the Mendelian law. There can be no question that allergy plays an important role in the etiology of many eye infections; vernal catarrh, recurrent retinal edema, and the various forms of scleritis, all have been directly traced to this source and once the proper treatment is instituted, the symptoms promptly abate.

Those of us who have been in the profession for more than fifteen or twenty years can look back and recall numerous cases that caused us no little trouble, which we now know were allergic in type. In recent years I have found that many cases of varying degrees of blepharitis are due to this cause; I have found that it arose through the ingestion of certain foods, but more commonly it is caused by some particular type of cosmetic.

Reference has been made to allergic symptoms experienced by farmers and others engaged in similar pursuits. Several years ago, the late Dr. J. W. Hadley, of Frankfort, told me of a number of lid infections observed among farmers in the prairie district near the city. These cases were seen only during the spring plowing season and closely resembled trachoma; in fact, Dr. Hadley treated these cases as trachoma for a period of several years ere he became aware that allergy was the exciting factor.

A careful study as to the cause of follicular conjunctivitis usually will reveal an allergic affair somewhere along the line; when we remember that sunlight, heat, and cold very often produce allergic symptoms, the etiology and diagnosis of these cases is made much more simple.

Ruedemann, of Cleveland, in the *Ohio State Medical Journal* for May, 1934, cites many types of infections about the eye that proved to be allergic in character. He reports one case of a boy who, within forty-eight hours after eating chocolate, gets a stye; he also states that chalazia are commonly allergic in origin. By no means have we exhausted the field of allergy in its relation to the eye and its appendages; it would seem that we have but scratched the surface, and that the future may change our viewpoint in many of our cases.

W. F. HUGHES, M. D. (Indianapolis): In a number of instances I have found that conjunctivitis was caused by some article of food the patient was using, and when that was removed, improvement followed. I want to mention one case which came under my observation again a few weeks ago. A nurse whom I had treated, several years ago, had an eye refractive error but was plagued with frequent recurrences of styes. She was refracted several times to be sure that no error was escaping attention, but seemed to have no effect upon the styes. Finally, I tried autogenous vaccine, and failure occurred again. Then I started with cod-liver oil, with very little change in the condition. I lost track of the individual for about three years. A very short time ago, I met her, and asked her how the styes were coming on. She said that she had not had any for a period of two and one-half years—for the reason that she had stopped eating peanuts. She was thoroughly convinced that whenever she ate peanuts, she had styes within a few days. I am trying to find out definitely about this, for it was interesting to me.

BENNETT KRAFT, M. D. (Indianapolis): I wish to congratulate Dr. Craft and Dr. Larkin on their fine and timely presentation.

Some believe that allergy is as old as life itself, and we might say that the first case of allergy

occurred at the time of Adam and Eve. Adam and Eve ate the apple, developed hives, treated themselves with fig leaf poultice, but had to scratch for a living the rest of their lives.

In treating vasomotor rhinitis and hay fever, we should not forget the endocrine factor. Many a patient will show a basal metabolism of 18 or 25 per cent minus. The endocrine imbalance taken care of, many more patients will be helped. It should also be remembered that physical allergy plays an important role in vasomotor rhinitis.

In an allergic individual the appearance of symptoms is dependent upon the sum total of the dose of all the allergens to which he is sensitive: foods, pollens and epidermals. If hay fever patients are tested for pollens alone, the percentage of good results will be much lower than if they are also tested for foods and epidermals, and treated accordingly.

Finally, I wish to make a plea for the prevention of allergic reactions. If we are treating families that are allergic, we should, without fail, tell them that their children may become sensitized by exposing themselves to an overdose of any allergen —by ingestion, inhalation or contact. While a small amount of allergens will not cause symptoms, an overdose, such as results from over-indulgence in certain foods or occupational exposure, will do so.

MALIGNANCY ENGRAFTED ON ACTINOMYCOSIS*

FRED McK. RUBY, M. D.
UNION CITY

"From our present knowledge, it would seem that cancer of the mouth is caused by some form of irritation in the presence of infection in some susceptible tissue. Blair states that the majority of all cases can be traced to leukoplakia or some local irritation, and that syphilis is supposed to be a strong predisposing factor." [1]

"Actinomycosis is a chronic infectious disease produced by the ray fungus streptothrix actinomyces, and characterized by infiltration or suppurative lesions of the head and neck, in the submucous tissues of the mouth and tongue, and elsewhere." [2]

Sixty-eight per cent of all cases are in the head and neck. It exhibits itself in the form of small nodules, large, firm and diffuse tumefaction. The progress is slow, or rapid, ending in pyemia.

The etiology of actinomycosis is difficult to prove, but it is found in man and cattle chiefly, and is thought by Figi and New to arise from carious molars, picking the same with straws, or chewing bits of straw or grass. Trauma and foreign bodies in the mouth and cheek often are causative factors.

The symptoms of actinomycosis in the mouth are stiffness and swelling, with pain in the affected region. Some soreness of the throat and stiffness of the neck are common, with late stages causing dysphagia, dyspnoea and earache. When pulmonary symptoms are present they are unilateral.

The case I am about to report has had all the predisposing causes in the calendar, but it was only after an attack of actinomycosis that the malignancy was manifested. Leukoplakia was present, but so were the characteristic sulphur granules and the ray fungus. Also, as typical sinuses appeared below the mandible, the watery yellowish discharge contained the granules in amazing numbers.

When after eight or nine months the case was reviewed at the Cleveland Clinic, the actinomycosis had disappeared, but the leukoplakia and the carcinoma were still present.

The history, as given to the clinic, is as follows:

"Mr. W. McC. of Union City, Indiana, came to the Clinic on the eighth of December, 1933, referred for treatment of actinomycosis of the jaw.

"The history was that the present illness began about ten months before the patient's entrance to the Clinic, when the patient noticed a white spot on the inside of his cheek. This spot was about five mm. in diameter and rough to his tongue. Three weeks later a similar spot appeared on the right lower lip. In another week or so he noticed another spot in his mouth on the right. He did not notice any lumps or swelling of the face until after the beginning of the x-ray therapy about nine months ago when the right side of his face began to swell. The swelling under the lower right side of the jaw was opened and had drained foul pus ever since.

"Pain of a dull, pulling character first appeared after x-ray therapy, being present for a few days and then disappearing for a few days. The swelling would also come and go, but never entirely recede.

"He had had about ten x-ray treatments, the first one being nine months before, and the last one one month before his entrance to the Clinic. There was a loss of ten pounds of weight in one year, and the patient experienced considerable difficulty in opening his jaw.

"Personal history showed him to be a man fifty-eight years of age whose occupation was that of an automobile upholsterer and whose family and marital history was average, throwing no light on the trouble. There was no complaint regarding the gastro-intestinal system; his appetite was good; there were no genitourinary symptoms. His endurance was only fair; he did not sleep well.

"On physical examination he was found to be somewhat emaciated. His height was 65¾ inches; weight 118½ pounds. Temperature was 98.6; pulse 96; and blood pressure 140/80. There was a cata-

* Presented before the Section on Ophthalmology and Otolaryngology at the Indianapolis session of the Indiana State Medical Association, October, 1935.

[1] Mead, S. V., D. D. S: Diseases of the Mouth. p. 562.

[2] Des Jardins: *Radiology*, October, 1928.



Patient W. M. Actinomycosis of Jaw

ract of the left eye (perceive light only); the pupils react. The teeth were markedly carious. There were a few small firm lymph nodes in the right cervical region. The thyroid was not enlarged. Chest expansion was only fair. Percussion notes were resonant; breath sounds were normal and there were no rales. There was no enlargement of the heart; the sounds were regular, rhythmic and quite forceful; there were no murmurs.

"There were no masses or tenderness in the abdomen; liver and spleen were not palpable. The rectum was normal except for a few external tags; the prostate was not enlarged. Neurological findings were negative. Reflexes seemed normal; sensory, motor and endocrine disturbances were not present.

"There was a mycotic infection of the floor and right side of the mouth inside of the right cheek; it was filled with granulation tissue and in places with a yellowish white material which appeared in groups of pinhead size or slightly larger; some of these could be wiped off. The right face was swollen; there was a large incisional ulcerating wound under the right mandible and surrounding the granulation tissue.

"It was the impression of the examiner that there were present: (1) Mycotic infection, floor and right side of mouth. (2) Dental caries. (3) Cataract, left eye.

"An x-ray was taken which showed almost the entire left mandible to be destroyed apparently by a carcinoma of the jaw. The laboratory reports were as follows: Urinalysis negative. Blood counts, 4,040,000 red blood cells; white blood cells, 13,200; and haemoglobin, 58 per cent. The differential count showed 74 per cent neutrophiles, 1 per cent eosinophiles, 21 per cent lymphocytes and 4 per cent monocytes. The color index was .72. The blood sugar was 112 mg. three hours postprandial. Serologic reactions showed a three plus Wassermann and positive Kahn test. A smear and culture of the lesion of the jaw was negative for acid test bacilli, negative for fungi, and showed only streptococcus hemolyticus.

"Under the circumstances we believed that the positive Wassermann and Kahn were of no particular significance.

"A small piece of tissue was removed from the anterior portion of the ulcerated lesion of the right lower jaw and this was reported as squamous cell carcinoma, lower jaw, right.

"We felt that nothing could be done for this patient because an operation would be out of the question and radium and roentgen ray treatment would be of no avail.

"There was a small sequestrum which was keeping up some of the drainage and might eventually come out or might have to be removed.

"We informed the patient of the character of his condition and referred him back to you, suggesting to you that palliative measures be instituted and that you might give large doses of roentgen ray after the sequestrum separated." [3]

Things not brought out in the above history are, first, that as an upholsterer of automobiles the patient had carried many tacks in his mouth much of the working day; second, the patient was an inveterate tobacco chewer; third, the patient had a lone, badly carious third molar in the upper jaw on the affected side; and, fourth, the patient had owned a pet cat which suffered with a "lumpy" swelling of its jaw for a long time, and which had a habit of sleeping on the patient's bed, this being several weeks previous to his first complaint.

At the present time (July, 1934) there are a series of sinuses just below the mandible which now reach slightly toward the left side. Until the last few weeks they were limited to the right side only. The right half of the mandible is practically gone, the gums about the alveolus are swollen and reddened, all lower teeth are loosened and gone on that side. There are no palpable glands of any size in the neck. Some fourteen months after the onset, the loss of weight is only twenty pounds at the most. The patient suffers rather steadily from the swelling and tenderness about the zygoma. The sinuses are now typically malignant about the edges. There have been no recent hemorrhages al-

[3] Portmann, Cleveland Clinic. Private correspondence.

though some were dangerous as the skin was eroded.

The prognosis is ultimately fatal. The progress of the disease has been so slow that the span of life promises several months yet, unless he is more successful than in his early July attempt to treat himself with unlimited amounts of carbon monoxide gas.

Certain items in the treatment are worthy of note. First, when first seen, he had had two x-ray treatments, after each of which he seemed worse. Subsequent treatments gave the same result. Second, under intensive administration of potassium iodide, the patient was very uncomfortable, with slight congestion of the submaxillary and parotid glands. Third, the greatest improvement seemed to follow the cleansing of the mouth, followed by thorough permeation of the soft parts with tincture of metaphen, which gave us, you recall, fifty per cent alcohol, ten per cent acetone and metaphen 1-200, all of which are supposed to antagonize or kill fungus growths. The result was the disappearance of the fungus as shown by the lack of sulphur granules, in the early winter. The sad feature was the failure of the swelling to reduce. Lastly, the carcinoma has been very slow in its progress as compared to any malignancy I have ever encountered in the mouth and neck.

Zimmerman of Saint Paul brings out the fact that the lesion of actinomycosis is essentially a granuloma. Cahil of Washington says that the infection nearly always begins about a carious tooth, or other abrasion of the mucous membrane. At operation in old cases, particularly in the abdomen, are found irregular pockets of pus, with old sinuses, surrounded by dense fibrous stroma and associated with the presence of polynuclear leukocytes.

Edwards of Detroit says that cervico-facial actinomycosis is characterized by swelling of the cheek from above the zygoma to below the mandible, from the ear to the anterior border of the masseter muscle.

Havens says, "because of its hard, deep-seated induration, actinomycosis may simulate malignant disease. Cases with multiple sinuses may simulate tuberculosis."

"No extraction should be performed in areas showing gingival lesion or growths until it has been well established that cancer has not yet developed."

"There is a consensus of opinion that, in most cases, this lesion can be improved with careful attention to cleanliness and avoidance of further irritation."—C. W. Waldron, of Minneapolis.[4]

Simmons says that ninety per cent of buccal membrane malignancies are in males; average age 59; eighty per cent used tobacco, mostly smoked; some chewed; leukoplakia present in twenty-five per cent; syphilis in seventy per cent. Average duration, 4 to 7.2 months.[5]

[4] Waldron, C.W.: *J. Am. Dental Assn.*, December, 1932.
[5] Simmons, C. C.: *Ann. Surg.*, October, 1930.

Miller of Brooklyn believes that small radiations are irritating. Moore of Muncie concurs in this statement.[6]

Hubbard of Huntington says, "However, the factor which plays the major role is syphilis. It is strange to find that while syphilis is frequently overlooked elsewhere in the body, malignancy in the mouth is often treated with antiluetic therapy before correct diagnosis is made."[7]

French says, "The diagnosis of actinomycosis is the chronic nature which partakes of the characters partly of a neoplasm and partly of an abcess."[8]

Hetzler says that whenever an ulcer of the jaw is accompanied by an induration of the cheek, actinomycosis must be thought of, and if puckered crater-like openings are formed, the diagnosis is certain, irrespective of the pus. Hopkinson did not see the granules after eighteen months. Mead says the lesions are tender, but not accompanied by great pain. There is round cell infiltration and proliferation of connective tissue cells. The tissue is rich in leukocytes, and occasionally giant cells appear.

COMMENT

This case showed its flareup after the actinomycosis infection. Other factors may have prepared the field.

The similarity of many signs and symptoms made the exact time of involvement of malignancy difficult.

The x-ray treatment seemed positively irritating, at least clinically.

Conservative treatment has possibly prolonged the patient's life with reasonable comfort until recently.

CONCLUSIONS

Carcinoma of the cheek, mouth and jaw is usually engrafted on a previous irritant condition.

Syphilis is usually present, but its etiological importance is not fully understood.

Tobacco was used in just about the percentage of cases with cancer of the mouth as in all men regardless of malignancy.

X-ray treatment to be successful must be massive—that is, a single lethal dose seems to be best in a case where the involvement also includes an irritant like the actinomycosis.

I doubt the efficiency of radical surgery to add to the patient's comfort, even though it might somewhat prolong his life.

Physicians' Bldg.

DISCUSSION

C. G. CULBERTSON, M. D. (Indianapolis): This very interesting case presents many problems connected with both actinomycosis and cancer.

The organism responsible for actinomycosis belongs to a class of organisms midway between

[6] Miller, Geo. I.: *Med. Jour. and Rec.*, October 8, 1933.
[7] Hubbard, J. E.: *W. Va. M. J.*, 1933.
[8] French, Herbert: Index to Differential Diagnosis. Wm. Wood & Co., Baltimore, 1928.

true bacteria and true fungi, the class name of which is streptothrix. Actinomycosis has long been known in cattle mainly in the so-called lumpy jaw of cattle. The discharge of so-called sulphur granules, which are masses of the organism, is a feature that often leads to the diagnosis. It is important to remember in making a diagnosis from the pus alone that there are some seventy strains of this organism, of which only three are considered pathogenic, so that one may encounter the organism as a harmless contaminant.

From the gross character of the lesion, the condition was confused with sarcoma before the discovery of the organism. While more than 60 per cent of these cases have the lesion in the head and neck, I have had opportunity to study three cases of gastrointestinal forms. The prognosis is very much more serious in the deep visceral forms than when the lesion is limited to the skin.

There can be definite harm done in cases where we do make the mistake of getting hold of a nonpathogenic actinomyces. We have no animal experimentations by which to prove the virulence of a given organism. I know of one instance where a kidney case was treated over a long period of time for actinomycosis of the kidney and it has been shown that he had staphylococcic abscesses in the beginning, and if a proper diagnosis had been made, the patient would have had one whole kidney instead of one-half kidney at the present time.

I believe examination of tissue from the lesion and finding typical colonies in the inflammatory tissue is the surest way to make the diagnosis.

The literature, especially on the matter of classification of the organism, is very confusing. A related organism, the so-called actinobacillus, is probably responsible for lesions of similar character.

A report from the Mayo Clinic states that fifty per cent of their cases were still living and that x-ray treatment was the best method of therapy.

I believe the evidence Dr. Ruby has in this case points strongly to the diagnosis which he has made.

☆

IF YOUR MEMBERSHIP DUES FOR 1935 ARE NOT PAID, YOU WILL NOT RECEIVE THE JOURNAL AFTER THIS ISSUE

A STUDY OF THE MODERN CLASSIFICATION OF KIDNEY DISEASE*

S. W SCHNECK, M. D.
MT. CARMEL, ILL.

The study of nephritis beginning with Bright in 1836 has led to the recognition of various types of kidney diseases which have finally received consistent outlines in the classic monographs of Volhard, Fahr, Addis and others. The outstanding and histological changes which have been observed are (1) inflammatory glomerular destruction; (2) thickening of the small renal arteries; (3) degeneration affecting most markedly the tubules.

One type of renal failure resulted in retention of water and chloride, and another in the retention of nitrogenous elements according to the older belief. We now feel that this is not the case, but when the kidney is sufficiently damaged to cause retention of one substance, all other substances excreted by the kidney are likewise retained. The result is that in cases of nitrogen retention, there is also a retention of water as evidenced by nocturia. The kidney is not able to excrete the water taken by the individual during the day in the usual time but is forced to continue this excretion over the entire 24 hours. On the other hand, in massive edema without nitrogen retention, the fault does not lie with the kidney, as this organ is able to excrete all the water brought to it, but the edema is due to retention of water by the tissues.

The quantity of water in the tissues depends upon three factors: (1) the pressure of the blood in the capillaries; (2) the condition of the capillary wall; and (3) osmotic pressure of the blood in the capillaries. The first occurs in cardiac failure which is so common in hypertensive patients. The chronic passive congestion which results from a failing heart increases the hydrostatic pressure of the capillaries, resulting in edema. In the second type, damage to the capillary wall, not only the renal capillaries but the capillaries all over the body are permanently or acutely affected, having increased permeability and collection of fluid in the tissues. In the third factor, osmotic pressure of the blood in the capillaries, the capillary wall acts as a semipermeable membrane allowing the crystalloids to pass freely from blood to tissues and the reverse, but they are impermeable to the colloids, the most important of which is protein, particularly albumin. These colloids exert an osmotic pressure tending to draw the fluids into the circulating medium. If large amounts of albumin are lost from the blood stream, a fall in this colloid osmotic pressure takes place and massive edema results.

The point of location of lesion is important, there being two. One, the vascular system, the other, the glomerulus, the latter being a vascular unit in which the capillaries have beyond the usual layer, a layer of greatly flattened epithelial cells

* Presented before the Gibson County Medical Society, February 11, 1935.

which are derived from the tubules. It is obvious that inflammation on either side of this layer will likely extend to the other side. Hence, most old cases are a mixed form of nephritis.

Hypertension is a God-given favor to the nephritic indeed, as it is essential to the prolongation of his life. It is a good thing for the patient that doctors have been unable to eliminate hypertension.

NEPHRITIS	A. Glomerulo (Nephritis)	1. Focal	Small multiple emboli, Pneumonia, Septicemia, Endocarditis, Malaria, Arsenic Cantharides. Good renal function. Leaves when cause is removed.
		2. Acute	Most always streptococcic, Scarlet fever, tonsillitis, purpura, erythema. A disease of kidney capillaries. No cultures in urine. Edema. Duration 4 mos. Low protein diet. No medicine. If edematous reduce salt and fluids.
		3. Latent	Follows acute. Blood pressure normal. Exacerbations follow recurring tonsillitis. Tendency to become chronic active.
		4. Chronic Active	Nephrotic type. Lasts over 4 months. Under nourished, sallow, edema, albuminuria, hematuria. Usually lasts 2 yrs.
		5. Terminal	Uremia replaces wet nephritis. Blood in urine; edema disappears; increased B. P.
	B. Arteriosclerotic (Nephro-sclerosis)	1. Benign	Hypertension. Eye ground change. Duration many yrs., after hypertension starts. Does not start in old age.
		2. Malignant	Extremely high B. P. Renal failure, usually in few months. Do not attempt to lower B. P.
	C. Nephrosis*	1. Lipoid (Epsteins)	Very rare. Tbc., Lues, Pregnancy. Edema. Often no cause found.
		2. Amyloid	Often general Amyloid disease. Tbc., Lues, Pregnancy. Regeneration of tubules. Edema.
		3. Kidney of Pregnancy	Diagnosis of cause obvious. Treatment depends on it.
		4. Necrotizing Corrosive Sublimate	History of poison, treatment of same.

* Nephrosis is primarily a disturbance of protein metabolism. Great loss of albumin. Edema. May be toxic, endocrine, liver. No sodium. Reduce fats; increase protein intake to make up for loss of albumin. Congo test.

A.—1. *Focal nephritis* is in itself a benign lesion resulting from multiple small renal emboli. It occurs typically in subacute bacterial endocarditis, septicemia, pneumonia, malaria and chemical intoxications, such as arsenic and cantharides. The condition gives rise to no symptoms and is detected only on examination of the urine which shows albumin and red cells. The renal function tests do not deviate from the normal. The condition heals completely when the cause is removed and no treatment is required.

2. *Acute glomerulonephritis* results from infection, nearly always streptococcic, the commonest causes being scarlet fever, tonsillitis, bacterial endocarditis, and that large group of indiscriminate conditions described by Osler, characterized by purpura, erythema, etc. Pathologically the primary lesion is in the glomerulus; in other words, it is a disease of the capillaries of the kidney. We also find that the capillaries throughout the whole organism are involved. Unlike focal nephritis, bacteria cannot be cultured either from the urine or from the lesions themselves at post mortem. It seems probable that acute nephritis like rheumatic fever is an allergic manifestation of a streptococcus infection elsewhere in the body. The disease is characterized by general malaise, headache, edema, hypertension and occasionally by convulsions. The urine is decreased in volume and contains large amounts of albumin and many red and white cells. Cellular and granular casts are present. The renal function is diminished and the blood non-protein nitrogen is elevated. The treatment of the condition is primarily rest and removal of the cause. Absolute bed rest is indicated which should continue for months if necessary. As soon as the acute symptoms have subsided, the focus of infection which caused the attacks should be removed. This is usually the tonsils. Because of the edema, fluids and salt should be low. Protein is limited to the point of nitrogen equilibrium. Medication is of only symptomatic value.

By far the greatest majority of these cases heal completely. Some pass directly into a chronic stage of the disease, others quiet down but continue in a latent form, only to flare up at a later date, and a very few die in the acute attack.

3. The *latent* type of glomerulonephritis always results from an acute attack of the disease. The patient improves and is subjectively well but continues to show albumin or blood in the urine. The blood pressure usually remains normal and the tests of renal function remain essentially normal. Occasionally the disease will progress to the terminal stage without apparent cause, but more often there will be repeated acute exacerbations following sore throats or other minor infections which will eventually lead to the terminal stage of the disease. Very rarely the latent type passes into a chronic active glomerulonephritis.

4. *Chronic active* glomerulonephritis (the nephrotic type of glomerulonephritis of Volhard and Fhar) is at times the direct result of acute glomerulonephritis. The patient, instead of recovering within a period of four months, remains ill, malnourished, edematous albuminuria and hematuria continue, and over a period of months the trend of the renal function tests is downward. At times, before there is marked elevation of the blood pressure or collection of nitrogenous elements in the urine, this disease is indistinguishable from lipoid or amyloid nephrosis and only the history of hematuria or the progress of the case will serve to differentiate them, as the chronic active glomerulonephritis may show all the characteristics of nephrosis which will be described later. Chronologically, the chronic active stage lasts from six months to two years or even as many as five before it progresses into the terminal stage.

5. In the *terminal* stage of glomerulonephritis the picture of the uremic syndrone tends to replace that of wet nephritis. Edema disappears, red cells are no longer found in the urine and the blood pressure rises. The tests of renal function show marked impairment and unless the case terminates in cardiac failure or cerebal hemorrhage which is the rule, uremia is the result. The terminal stage of chronic glomerulonephritis shows many of the characteristics of arteriosclerotic nephritis and their differentiation is often impossible unless the history of the case is known.

B.—The most striking clinical feature of arteriosclerotic nephritis (nephrosclerosis) is elevation of the blood pressure and its consequent changes, such as cardiac hypertrophy and eye ground changes, plus slight proteinuria. As was pointed out long ago, there are two types of this disease, the benign and the malignant. In the benign form, the nature of the disease continues unaltered to the end which does not come until many years after the first appearance of hypertension. The symptoms are almost entirely circulatory and death usually comes from circulatory rather than renal failure. This type of the disease is most apt to occur in elderly people and is usually not associated with the extreme hypertension of the malignant type. Conversely, the malignant type is more prone to occur in young or middle aged patients. The blood pressure reaches extreme heights and death follows usually within some months with the picture of renal failure. Not infrequently, patients will go along with the benign type for many years and, without apparent reason, the condition will become malignant and terminate within a relatively short time. Pathologically, the difference between these two types is only one of degree. The primary lesion is one of sclerosis of the arterioles to which necrosis is added in the malignant form.

C.—*The consideration of the Nephroses.*—Amyloid nephrosis and lipoid nephrosis may well be taken up together as their clinical features are practically identical, although the etiology and pathology are vastly different. Amyloid disease of the kidney occurs in chronic affections, such as tuberculosis, syphilis, bronchiectasis, empyema, Hodgkin's disease, etc., and is due to deposits of amyloid in the kidney. Unlike the other organs, however, lardaceous disease of the kidney may occur without any known cause and in these cases is practically always diagnosed as lipoid nephrosis. Lipoid nephrosis appears to accompany or follow a heterogeneous set of intoxications, such as tuberculosis, syphilis, pregnancy, toxemia, etc. It is rarely preceded by an acute infection and in the great majority of cases there is no obvious etiology. Pathologically, the primary lesion is a degeneration of the tubules with very little glomerular or arteriolar damage.

The treatment of these nephroses is primarily the treatment of the edema. If there is any cause, such as syphilis, tuberculosis, osteomyelitis, etc., it should be treated. Because of the diminished blood protein, the patient should have a high protein diet from 120 to 250 gms. daily, with a very low fat content, 30 to 40 gms., because of the cholesterolemia. Of course, salt and water should be kept at a minimum. With any acute illness, such as pneumonia, if the patient lives, the edema will frequently disappear.

The constant loss of albumin in cases of chronic glomerulonephritis and in amyloid kidneys is not difficult to understand when we consider the marked albuminuria which characterizes these conditions, particularly if the individual has been placed on a low protein diet which in the past has been the rule. However, in lipoid nephrosis the situation is somewhat different. The kidneys in these cases are grossly and microscopically normal, except for the infiltration of fat which is apparently a result and not a cause. The infrequency of this disease has already been pointed out; however, cases have been observed which even the firmest skeptic cannot deny. One case had been observed for twenty years and finally at autopsy showed no evidence of renal damage. A considerable number have been observed for a shorter period. The problem then confronts us as to how to explain the profuse albuminuria in the presence of normal kidneys.

Nephrosis is grouped with the renal diseases, yet it seems obvious that the kidneys are only byways in its pathogenesis. It would seem that fundamentally it is a disturbance of protein metabolism. The cause of this disturbance is at present uncertain. Various chronic infections, endocrine imbalance, endogenous and exogenous toxins, anaphylaxis, and constitutional predisposition have all been blamed but there is very little evidence to substantiate any of these as causes. But whatever its cause, lipoid nephrosis is a disturbance of protein metabolism just as diabetes is a specific disturbance of carbohydrate metabolism. This analogy led Epstein to suggest as a substitute for nephrosis the term lipoid-protein diabetes.

There is very little experimental evidence which sheds any light on the basic pathogenesis of the disease. However, it is well known that foreign protein such as egg albumin when injected intravenously is excreted unchanged by the kidney. The only adequate study that I have been able to find was made by Middowson. She studied the urinary and serum proteins in a group of nephritic cases and in one case of lipoid nephrosis, and found that in nephritis the serum protein and urinary protein were identical; also that the protein was identical in all cases studied. In the case of nephrosis the urinary protein showed racemization curves, osmotic pressure, and specific refractions identical with the normal but there was a slight chemical difference in the protein. This one observation tends to substantiate the generally accepted theory; namely, that the serum protein is in some way altered and is a non-threshold substance to the kidney.

The role of the liver is coming to be regarded as of considerable consequence. A symptomless but definite hypoglycemia has been observed in nephritic children. A loss of trypanocidal activity of the blood serum in nephrosis as well as the general water imbalance suggests that the liver may be at fault, as the liver is normally active in these functions; however, there is no anatomic evidence except fatty infiltration which is probably secondary to the depletion of serum protein and its consequent lipemia.

Be the underlying factor what it may, the symptoms of lipoid nephrosis are caused by the excretion of protein and fall in the serum proteins just as is the case in amyloid nephrosis and in the nephrotic type of glomerulonephritis.

In any given case presenting the nephrotic syndrome, our first problem is the definite diagnosis as to the exact type. This is a very difficult problem as early in their course all three types present the same clinical laboratory findings. The history may be helpful in that a history of sore throat followed by acute nephritis and finally the nephrotic syndrome definitely places the case in the category of glomerulonephritis with a nephrotic component. Also a history of any long standing infection such as osteomyelitis or tuberculosis will at once arouse a suspicion of amyloid kidneys, or if we find other evidence of amyloid disease such as a large spleen or liver, our problem has been clarified. If such leads are lacking, we must follow the case for a period of time before a definite diagnosis can be made. We know that true lipoid nephrosis continues for many years with exacerbations and remissions, and if these patients die, it is the result of secondary infection such as pneumococcus peritonitis, and never of progressive renal failure. Amyloid nephrosis on the other hand occurs in a kidney that is largely replaced by the foreign substance and after a period of time evidences of failing renal function are manifested. These cases rarely last more than three or perhaps four years. In the case of the nephrotic type of glomerulonephritis, we also find evidence of renal disease. In addition to the albumin and casts in the urine as time goes on, red cells usually appear. The renal function tests show a steady tendency toward a failure of renal function and there is a rise in the blood pressure. From the date of onset of the symptoms, the complete course of the disease ending in death is nearly always completed within a four-year period.

In Europe and in recent years in the United States claims have been made that the type of disease can be definitely diagnosed by means of the Congo red test. It is claimed that the kidney of lipoid nephrosis is the only kidney that excretes Congo red unchanged in the urine. It is also claimed that the dye has a marked affinity for amyloid tissue which quickly removes it from the blood stream. The test is made by injection of a solution of Congo red intravenously. After a period of time blood is withdrawn and a sample of the urine obtained. If the urine is red, an unconditional diagnosis of lipoid nephrosis can be made. In this case, the blood serum loses its fresh color. If there is amyloid disease the urine remains clear and the blood serum again fades out as the dye is absorbed by the amyloid. In the case of glomerulonephritis, the urine remains colorless and the blood is heavily colored by the presence of the Congo red. The test is still in the experimental stage but gives promise of being of at least some value in the differential diagnosis of the various types of nephrosis.

The treatment of the nephrotic syndrome is essentially the same in all cases regardless of the underlying pathology, and this treatment is directed to the relief of the presenting debilitating symptom, namely edema. The number of methods suggested is evidence enough of the lack of reliability of anyone. It has been the experience of everyone who has handled these cases to meet with failure on every attempt and after giving up hope have the patient spontaneously and for no known reason, begin a diuresis which rids him of all edema and leaves him symptom-free. Any infection or fever may very well result in complete subsidence of edema. In all cases of glomerulonephritis and amyloid disease, edema eventually entirely disappears; as the renal function fails and retention of nonprotein nitrogen occurs, the edema almost universally disappears. These occurrences make one skeptical of the value of most of the methods recommended.

It is logical with the serum protein depleted to such a marked degree and the blood lipoids high, that a diet high in protein and low in fat would be of value. If by this we could elevate the percentage of albumin in the serum, the edema would disappear. This diet is reported to be of value but my own experience with it has been anything but happy. Diets with a daily protein content as high as 250 gms. have been used without in any way influencing the edema or changing the serum albumin levels as much as .01 mg. per cent.

Restriction of the fluid intake seems to make very little difference in the edema. This is reasonable, however, if our concept of the disease is correct. The kidney is perfectly able to excrete the water that is brought to it. It is merely an accumulation of water in the tissues because of a lowered osmotic pressure in the vascular system. Forcing of fluid is obviously a poor policy but restriction below the normal requirements is of no value.

The intake of salt definitely tends to increase edema. This effect is due to the sodium ion. Sodium apparently tends to become fixed in the tissues and this increases the osmotic pressure, drawing fluid out of the capillaries. It has been suggested that potassium be substituted for the sodium in the diet. Potassium tends to displace sodium and a consequent diuresis results. Practically, sodium should be restricted to a minimum and if potassium

chloride produces a diuresis it is well worth while; however, more often nausea and vomiting prohibit its use.

Since the basal metabolism is universally depressed, thyroid therapy has been recommended. A few reports are encouraging but more often failure is the result. As much as 80 grains of desiccated thyroid by mouth or an equivalent amount of thyroxin intravenously was given to one patient without in any way influencing the course of the disease.

Calcium therapy and parathyroid therapy have been used and in an occasional case have seemed helpful. Antisyphilitic treatment is logical in the syphilitic cases but doesn't seem to affect the course of the disease.

After the more specific measures have been tried, and usually without success, we fall back on the various diuretics. The xanthine diuretics, theobromine and theophylline occasionally result in diuresis but as a rule more success is had with the mercurial diuretics. These drugs are most effective after a mild acidosis has been created. This is done with large doses of ammonium chloride or ammonium nitrate for several days. The mercurial is then injected either intravenously or intramuscularly. Novasurol and salyrgan are the drugs used. The latter seems to be somewhat more effective and the less toxic of the two. An added advantage of these drugs is that they do not seem to lose their effect after repeated usage and repeated injections may be made without any toxic manifestation.

CONCLUSIONS

1. The nephrotic syndrome is the direct result of a depletion of the serum protein.
2. True lipoid nephrosis is not a primary renal disease but a disease of metabolism resulting in abnormal blood proteins which are excreted by the kidney as non-threshold substances.
3. The methods of treatment employed at present are unsatisfactory.

INFANT DIARRHEA WITH SPECIAL REFERENCE TO APPLE THERAPY*

CHARLES A. TOMPKINS, M. D.
INDIANAPOLIS

HISTORY

Almost twenty years ago, Heisler published his first observation on the raw apple diet for the treatment of the symptom diarrhea. He used the treatment in any individual regardless of age and apparently, in most cases, regardless of the underlying eitology and pathology. Among other diseases, it has been used by Moro, Heisler and others in acute dysentery, typhoid, chronic dyspepsia, chronic digestive insufficiency and mucous colitis. According to Heisler,[1,2] any type of apple will do, even if extremely sour. He frequently gives the whole apple unpeeled, or in cases of small children, grates the whole apple to a pulp. When the patients experience thirst, in spite of the apples, which, he states, is rare, he gives tea made of cooked apple peelings. Heisler has had similar results with other fruits. In one of his early articles, he mentions a letter from a sailor who, during the Chinese Expedition, was taken very ill with dysentery. While at Ceylon, he purchased and consumed about seventy or eighty bananas. His condition promptly improved.

Having read of Heisler's miraculous results, Moro[3] proceeded to make systematic tests with children. He chose mellow, ripe apples; they were peeled, cored, and grated. One to three hundred grams, and even more, were given three times daily. For two days nothing else was given. It seldom was necessary to add tea at night, as the apple seemed to supply ample fluids. After the two "apple" days, a diet without milk and vegetables was given for two days as a transition, then the ordinary diet was given.

Moro relates an interesting story of a young soldier and four or five comrades. It was in 1918, behind the eastern front, that a group was in the hospital, with dysentery. Tortured by hunger, some of them ate several unripe apples, which they had spied in a nearby garden. In the hospital they received nothing but black tea. That night their tenesmus markedly improved and their discharges of blood and mucus decreased. The following day found them helping themselves to more apples with further improvement. One of the group who didn't eat of the apples, died, whereas the remainder slowly improved. The major-physician was greatly angered by the boys' indiscretion and especially when they suggested that the apples were responsible for their recovery.

This story was told by one who had subsequently read of Moro and Heisler's apple diet in dysentery. He thought that what he had done in ignorance might be interesting for the medical profession and profitable to the world at large. He added that he had had no gastro-intestinal symptoms since his escapade thirteen years before.

Since the time Heisler and Moro revived apple therapy from folk medicine, there have been numerous publications and many slight modifications. Favorable reports come from Japan, Russia, France,[4] South America and North America.[5] An apple powder known as "Aplona" is on the German market,

* Read before the Indiana Pediatrics Society, March 13, 1935. Work done at Riley Hospital, Indianapolis, under direction of Dr. Matthew Winters.

[1] Heisler, August: Raw Apple Diet in Diarrheal conditions in childhood and adults. *Klin. Woch*, 9:408, (Mar.) 1930.

[2] Heisler, August: Raw Apple Days in all Diarrheal Conditions in Children and in Adults. *Fortschritt der Therapie*, 7:279, 1931.

[3] Moro, E.: Two Days Apple Diet (Raw Grated Apples) in Diarrhea in Childhood. *Klin. Woch.*, 8:2414 Dec. 24), 1929.

[4] Popoviciu, G.: An Apple Diet in Diarrheal Disturbances In Infants. *Rev. franc de pediat.* 7:473, 1931.

[5] Reglien, N. C.: Diarrhea in Infancy and Childhood. *New Orleans Med. and Surg. J.* 26:362. (Aug. 1) 1933.

being produced by the Pediatrics Clinic of Munich.[6] Noll[7] finds this to be an excellent addition to the formulae of infants following plain apple therapy either with apples or apple powder. This method results in fewer relapses. Aplona is employed in apple soups also, with the appearance of typical apple stools.

METHOD OF TREATMENT

The therapy was begun in the Riley Hospital last season (1934) after other methods failed or progress was unsatisfactory. So it was in some desperation that the treatment was tried on a few cases at hand, who were not doing very well on other forms of therapy. The results were so excellent that it became almost a routine. There are only thirty cases to report in this group, as the treatment for the most part was limited to the more severe cases. It was difficult to keep a stock of desirable apples.

From twelve to eighteen hours, nothing was given by mouth. At the end of this period, apple therapy was begun. The apples were freshly scraped before each feeding and given every two hours. If the apple was not taken well, Dexin was sprinkled over the apple pulp or banana added in an equal amount. If taken well, banana was not added until the second day. To this mixture, Dexin was added in variable amounts, depending upon the caloric needs of the infant. Only very ripe or baked bananas were used. It was found that tremendous amounts of excess carbohydrate could be tolerated in the apple medium. Often an excess of 100 calories were given per pound of body weight. In every case, it was tolerated without an exacerbation of the diarrhea. To us, it has seemed that the apple pulp is a very desirable medium for excess carbohydrates, for, if given in milk or other food, a given carbohydrate is intolerable in much smaller amounts. All cases were given five per cent glucose water ad lib. This regime was carried out for an indefinite time, usually for four or five days after the diarrhea had subsided. In most cases formed stools appeared on or before the fourth day.

Due to the extreme dehydration and emaciation of many of the cases treated, it was necessary to give intravenous fluids during the first day or two. Some of the patients were given blood transfusions. This was done if there was not definite improvement following intravenous saline. The intravenouses were given slowly and continuously, often for twenty-four hours. Distilled water and normal saline was given alternately in 500 cc. amounts with five per cent glucose. Luminal was helpful before the apple had had time to relieve tenesmus.

In most cases it was not difficult to get the patient back on a normal diet; however the majority were sensitive to milk and would develop a recurrence of their diarrhea even in very small amounts. Our first additions were dry toast with jelly, crackers, jello and cooked cereal without milk. These articles were given as tolerated, but not in association with apple. In some cases over-ripe bananas were given also, depending somewhat on the likes of the individual. After this regime had been followed for several days, other foods were added with no restrictions, except milk and undue amounts of fat. In infants who had been on a bottle the following procedure was carried out: skimmed milk diluted equally with water was the usual first addition; if this was well tolerated skimmed milk was given the second day; this was followed by half skimmed milk. Finally whole milk was given with five per cent carbohydrates. In infants who had lost considerable weight, Dexin or banana powder was tolerated in large amounts, as additions to the formulae.

The cases treated included parenteral as well as enteral infections with equally good results.

CASE REPORTS

Twenty-four of the cases treated made uneventful recoveries. In these cases, there were no positive laboratory findings, except in patients who had parenteral infections and a consequent polymorphonuclear leukocytosis. In long standing cases, a secondary anemia was found. There were no positive stool cultures, although some of the cases clinically led us to expect typhoid or dynsentery pathogenes. A few cases showed blood and many showed mucus. In these patients the typical diarrheal stools appeared the second day, but in much less volume and frequency. The third day the usual thing was to find semi-formed green to brown stools. The characteristic fourth day stool came to be known as a typical "apple stool." It was a soft formed stool looking like an apple pulp that had been prepared and left standing a few hours.

The six mortalities died a death similar to those described by Minot, Dodd and Casparis,[8] as alimentary intoxication. The patients were from seven to twenty months of age. The infants were very emaciated and prostrated. The fontanelles and eyes were sunken, and the extremities were cold. All gave a history of vomiting; however, a few ceased after no food or water was given by mouth for twenty-four hours. These infants took apple poorly, although in one case, with forced feeding, the diarrhea improved but the toxic symptoms persisted. The vomitus at times showed blood. Terminally, deep respirations, muscle twitchings and even convulsions occurred. All of the cases apparently improved on the initial treatment of intravenous saline, alternated with distilled water and glucose; but relapse into a state of acidosis was invariable. The patients who died were the only ones showing casts, albumen, and sometimes red cells in the urine. Apparently the toxic substances injured all the tissues. The nervous symptoms were most

[6] Wiskott, Alfred: Apple Powder in the Treatment of Diarrhea in Children. *Klin. Wochn.*, 10:1252 (July 4), 1931.

[7] Noll, Anni: Further Experience With a Diet of Apple. *Kinderarztl Praxis* 3:296 (July) 1932.

[8] Dodd, K.; Minot, A. S.; and Casparis, H.: Guanidine as a factor in alimentary Intoxication in Infants. *Am. J. Dis. Child.* 43:1 (Jan.) 1932.

marked in one case, who was opisthotonic and had muscle twitchings. Minot,[9] Dodd and Casparis have considerable evidence to show that guanidin and guanidin-like substances are responsible for some of the severe symptoms of alimentary intoxication. As they have pointed out, some of these cases have had severe reactions to sodium citrate blood transfusions. This was our experience in one case. The reaction was similar to hyperguanidinism. A second transfusion was not accompanied by a reaction; this time the transfusion was preceded by one ampule of calcium gluconate intravenously. As pointed out by them in an extensive and carefully conducted research study, the calcium is the important factor in preventing guanidine reactions. In citrate transfusions the calcium is neutralized by the sodium citrate, leaving the guanidine without a leash. It may be stated that in this case, the diarrhea had markedly improved; however the toxic symptoms became worse until death ensued. So, as others have pointed out, the control of the symptom diarrhea is not the only thing to be considered, and it may be said that the good effect of apple is primarily a result of its control of this symptom, nothing more. Calcium may be an important adjuvant to the treatment, especially in the very toxic infants. Casparis gives the drug intravenously in severe cases followed by intramuscular injections, as a depot for slow absorption of calcium.

RATIONALE

What is the active principle in the apple diet? Since the analgesic effect occurs so soon after therapy is begun, there must be factors at play other than the tannic acid. Also Malyoth has pointed out that tannic acid is present only in sixty-eight thousandths per cent, and that it is dissociated in the small intestine. Fruit acids are present in only fifty-nine hundredths per cent and this is hindered by the buffer action of pectin and its salts. Malyoth[10] used the diet with equal results by adding an excess of sodium carbonate. Moro believes that the mechanical cleansing is an important factor. Malyoth[11] believes that the deprivation of nutrient to the inciting agent plays a role in dysentery. Kollmann[12] suggests that the vitamin content may have a relation to the cure, but also adds that this effect should not be over-estimated. The importance of cellulose seems slight since good results have been obtained with currant juice, which contains no cellulose, but a great deal of pectin. It has been suggested that the calcium and magnesium may be factors, too. Upon reviewing the literature, pectin seems to receive the most credit. This is attributed to its buffer action, its absorptive capacities, and its ability to bind amines. Malyoth believes that in addition to pectin, the acid may have a favorable metabolic influence, the tannin an astringent, and the cellulose an absorptive action. There is a relatively high nutritive value in the sugar; further the acidulous taste is pleasant to the patient and relieves thirst. The bulk relieves hunger. So it is apparent that pure pectin is not advisable for treatment.

CONCLUSIONS

As in all medications there are objections. In handling a large group of hospital cases, the administration of large quantities of apples becomes a time consuming problem for nurses, since the apples must be prepared as given. Also there is considerable waste and if high grade apples are used, it becomes relatively expensive. Another objection is that many infants refuse the diet and gavage methods cannot easily be resorted to. Lastly, to the laity, apple therapy does not constitute a medicine and often is refused or carried out injudiciously.

We believe the therapy to be of distinct value in that it alleviates symptoms, it usually gives permanent results, and it is safe.

[9] Minot, A. S.: Guanidine Intoxication: A Complicating Factor in Certain Clinical Conditions in Children. *Am. J. Dis. Child.* 46:522 (Sept.) 1933.

[10] Malyoth, Gunther: Action of the Apple Diet. *Klin. Woch.*, 10:1159 (June 20), 1931.

[11] Malyoth, Gunther: What is the Action of the Apple Diet? *Klin. Woch.*, 13:31 (Jan. 13), 1934.

[12] Kollmann, A.: Apple Diet in Diarrhea of Infants and Children. *Med. Welt*, 4:1067, 1930.

SOURCES OF ERROR IN RADIOGRAPHY OF ACUTE MASTOIDITIS*

LESTER A. SMITH, M. D.
INDIANAPOLIS

It is repeatedly impressed upon one responsible for reporting upon the roentgenologic aspects of disease of the temporal bone that there are in the American literature notably few summaries of the many pitfalls existing here. To personal observations have been freely added the salient points presented by many writers.

The temporal bone is a part of the body peculiarly prone to variations in structure and development. While many of these are due to old disease, their differentiation from a phase of recently active infection or the determination of the presence of such infection may be rendered quite difficult.

In discussing acute mastoiditis we are here considering an actual infection of the mastoid structure as distinguished from a simple congestion. Although Runge[1] has contended that even the operative finding of a thickened mucosa and a seropurulent secretion in the mastoid cells should not necessarily be construed as a true mastoiditis and Krainz (quoted by O. Mayer) would exclude from this classification pus under pressure without extensive bone absorption, it is ordinarily considered

(*Abstract of illustrated discussion in postgraduate course in otolaryngology, Indiana University School of Medicine, April 25, 1934.)

[1] Runge, H. G.: Indications for Mastoid Operation upon Basis of Roentgenogram. *Ztschr. Ohrenhk.*, 1921, 81:351.

that these are comprehended in the conception and that the roentgen appearance of clouding is confirmed if at operation a purulent exudate with thickened mucosa or granulation tissue is found, with or without microscopic evidence of bone disease.[2] Naturally, histologic study of operatively removed fragments gives the last word. Studies by J. Beck (quoted by Eisinger), Krainz and O. Mayer have shown that the microscopic appearance of tissues removed at operation have confirmed the roentgen diagnosis of acute mastoiditis when the gross appearance was normal. O. Mayer disagrees vigorously with the majority of writers, who have stated that bone disease is the only important factor and that one can speak of mastoiditis only when bone disease is present. He holds that a phlebitis and a periphlebitis constitute the essential factors. Beck comments, as do others, upon mastoiditis without cellular exudate, a circumstance explained by histologic study.[3] While it is only rarely that the non-pneumatized mastoid becomes infected, such has been known to occur.[4]

In chronic mastoiditis such fine distinctions rarely if ever arise. The question at issue usually concerns such matters as extent of a cholesteatoma, involvement of the tegmen or the capsule of the labyrinth by infection, completeness of a previous exenteration or diagnosis of acute exacerbation of infection, the general condition being ordinarily obvious although at times, especially in mucosus infections, there may be a deep extension of infection with superficial healing.[5]

We should first of all recognize the fact that a definite mastoid infection may demand surgical interference before roentgen changes are demonstrable at all. The danger of vascular extension may make operation imperative before bone absorption is sufficiently marked to permit of its recognition on the roentgen film. In general, sources of error in roentgenologic diagnosis itself have been well classified by Mayer[6] as lying in (1) technical faults, (2) anatomical variations from the usual normal, (3) variations from normal bone density not produced by disease (e. g., due to age of patient); and, (4) confusing factors inherent in disease proper.

TECHNICAL FAULTS

Although this is not the place for a detailed discussion of radiographic technique, it should be emphasized that it is essential for accurate conclusions that the radiographs should be as excellent as obtainable. Faults which may detract from such a result are many. The most frequent are: use of other than the finest focus x-ray tube; blotting out of detail by use of too penetrating a ray or by covering too large an area; superimposing shadow of auricle of ear over that of mastoid. Fractional-second exposures are usually necessary in examining young children, who often require strong sedation with barbiturics. Very frequently films made in an antero-posterior plane will reveal marked changes not visible in the usual lateral oblique views, such as erosion of the tip cells or of tegmen or an apical petrositis. The writer has never found in films made with the Bucky diaphragm the soft tissue detail essential for best diagnostic results in acute infections, although it is used by many. Omission of a check-up examination two to eight days after one with doubtful findings may lead to erroneous conclusions in a case running a deceptive clinical course.

Anatomical variations are made up of disturbances of pneumatization, variations in position and contour of the sigmoid sinus, individual differences in thickness of skull wall or of cortex overlying the mastoid cells.

In disturbances of pneumatization, which are usually due to old inflammatory processes, are found sources of error which are probably next in frequency to faults in technique.[6] Limitation of pneumatization lessens the accuracy of a roentgen diagnosis, the cells here being usually more or less clouded and poorly demarcated, and necessitates reliance upon careful study of contrast and detail. Comparison with the opposite mastoid cannot be relied upon to be of help, but should be made. Often a second examination after a two- to seven-day interval is the only way by which doubtful presence of an acute infection can be evaluated. In the pneumatization disturbances of lesser degree there are often found large cells containing incomplete septa which in case of general mastoid clouding may give every x-ray appearance of localized septum absorption. With such findings the demonstration of a sharply defined margin about the cell will weigh against its having been produced by recent infection.

The mastoid containing very small cells must often be scrutinized closely, infection here producing a loss of contrast and detail rather than any marked change in aeration. This in particular is a type of mastoid in which a clinical opinion favoring operation should not be greatly influenced by negative roentgen findings, since the relatively poor pneumatization may well obscure deeply placed infected cells or even a perisinus abscess. In other patients there is not infrequently loose, spongy bone filling up the entire normal mastoid, peculiarly deceptive in even a fairly good radiograph at times because it roughly simulates a large cavity. Study of a good radiograph for bone detail, with

[2] Eisinger, K.: Evaluation and Application of Roentgen findings in Otology. *Otologische Rontgendiagnostik* (E. G. Mayer), J. Springer, Vienna, 1930.

[3] Stewart, J. P.: Histopathology of Mastoiditis. *Jour. Laryngol and Otol.*, 1928, 43:689.

[4] Krainz, W.: Studies on Mastoiditis (Endostitis Mastoidea). *Ztschr. f. Hals-, Nasen-u. Ohrhk.*, 1926, 13:361.

[5] Mayer, O.: Histological and Clinical Investigations in Acute Mastoiditis. *Ztschr. f. Hals-, Nasen-u. Ohrhk.*, 1927, 17:301.

Mastoiditis: Studies of whole temporal bones and of bone fragments. Ibid. 1927, 18:628.

[6] Mayer, E. G.: *Otologische Roentgendiagnostik*. J. Springer, Vienna, 1930.

suitable variation of radiographic technique where indicated, will usually clear this question.

The sigmoid sinus may lie lateral to its usual position, the resulting thinness of the skull wall simulating bone absorption to some degree. Similarly, an anterior position of the sinus may simulate bone changes associated with bone abscess. On the other hand, one may fail to recognize bone destruction when the sinus is deeply placed in anterior position. The bony pocket containing a diverticulum of the sigmoid sinus may resemble an area of bone destruction. The roentgen report should include notation of these or other variations.

Ordinarily there is no difficulty occasioned by variations in thickness of the inner or outer skull plate, but at times cell clouding may be simulated by a thick cortex. Its recognition is facilitated by study of films made in the antero-posterior plane.[7] The presence of diploic bone, non-pneumatized, will usually confuse only when one cannot obtain the best possible films, as occurs at times with a young child.

The thin density of bony structure found in infancy[6] and often in old age, as well as the opposite condition of increased density often found in the aged, [7,8] presents difficulties in interpretation unless films are of excellent quality, the one with little differentiation resembling bone absorption and the other tending to conceal it or to simulate sclerosis from disease.

In the temporal bone with pneumatization poor or lacking on account of either immaturity or previous disease it is commonly impossible to speak with assurance of the presence of mastoiditis. It was formerly said that such could not be diagnosed before the age of five years,[9] but it is a common experience that pneumatization, which is ordinarily completed by the end of the fifth year, has advanced enough by the third year or even earlier to permit of recognition of infection here.[10] However, the developing cells at the periphery may present a confusing appearance, being airless and filled with soft tissue. Where pneumatization is slight it is considered by the majority of workers that it is impossible to diagnose infection from x-ray findings alone.[11] Anatomically infection in infancy does not ordinarily extend into the mastoid process further than the antrum, but Mayer feels that when dealing with an infection of some standing certain changes here may be regarded as pathognomonic of disease.[6] However, when pneumatization is still limited to the peri-antral region the accuracy of radiographic findings is very greatly decreased. In even the adult, disease may be present in an area which can be but poorly visualized on the radiograph, more frequently in a chronically diseased, sclerotic mastoid. Radiography at more than one angle is usually helpful if there is reason to suspect such a condition. It has been strongly impressed upon us in recent months that this is especially indicated if there seems to be any possibility of the existence of apical petrositis.

Apical petrositis in a slightly pneumatized apex may offer considerable difficulty, as in a case recently encountered by the writer and confirmed operatively, but it does not occur frequently in the absence of good pneumatization of the apex. Gradenigo's syndrome, consisting of abducens paresis and trigeminal neuralgia, need not be caused by suppuration of the petrous apex and conversely such suppuration may be present without these clinical symptoms.[12] On account of the far greater likelihood of development of apical petrositis in the pneumatized than in the non-pneumatized petrous pyramid, it has been advised that the question of such pneumatization be determined radiographically as early as possible in the course of mastoiditis, since infection here may be well developed before clinical symptoms of such involvement arise. In case of doubt, serial radiographic studies will then lead to an earlier clinical diagnosis. Undoubtedly many mastoiditis fatalities have occurred in the past because both clinical and roentgen diagnostic criteria of this complication have remained poorly developed until recently.

There are many confusing factors inherent in disease proper. In many instances of simple acute otitis, placed by some as high as fifty per cent, [13,14] by others at one hundred per cent,[15] there is mastoid clouding. Conversely, some maintain that true mastoiditis may at times be unassociated with cell clouding.[16] It has been the writer's personal experience that the latter situation cannot long exist and that a check-up radiograph made a little later usually clears the diagnosis. Such a condition is more readily understood when one analyzes the histological studies that have been made upon acute mastoiditis. While O. Mayer insists that an exudative process begins by the fourth or fifth day of

[7] Singer, L.: Inflammatory Diseases of the Middle Ear and the Pneumatic spaces of the Temporal Bone. *Ztschr. f. Hals-, Nasen-u. Ohrenhk.*, 1932, 32:110.

[8] Steurer: The Radiograph of the Mastoid Process and its Clinical Evaluation. *Ztschr. f. Hals-, Nasen-u. Ohrenhk.*, 1925, 12:504.

[9] Law, F.: Mastoids: Annals of Roentgenology. Paul B. Hoeber, N. Y., 1920.

[10] Evans, W. A.: Value of Roentgen Study of Mastoid Disease in Children under five. *Am. Jour. Roent. and Rad. Ther.*, 1923, 10:382.

[11] Hansc, W.: Acute Otitis Media and Pneumatization of the Mastoid Process. *Ztschr. f. Hals-, Nasen-u. Ohrhk.*, 1930, 25:424.

[12] Kopetsky, S. J., and Almour, R.: Suppuration of Petrous Pyramid. *Ann. Otol., Rhin. and Laryngol.*, 1930, 39:996: 1931, 40:157, 396, 922.

[13] Lange, S.: Pathology of Mastoiditis as Revealed by the x-ray. *Jour. Am. Med. Assn.*, 1910, 55:819.

[14] Plenn, A.: Radiography of the Temporal Bone in Ear Disease. *Jour. Laryngol. and Otol.*, 1924, 39:618.

[15] Taylor, H. K.: The Roentgenogram in Mastoid Disease. *Am. Jour. Roent. and Rad. Ther.*, 1928, 19:522.

[16] Beck, J.: Discussion of paper by W. Krainz (Origin and course of mastoiditis). *Ztschr. f. Hals-, Nasen-u. Ohrheilkunde*. 1925, 12:497.

The inflammatory process in the course of mastoiditis. *Ibid.*, 1926, 15:256.

acute mastoiditis, he, Stewart and McMahon[17] have concluded that the veins of the mastoid are the first structures to be involved and other structures only secondarily so. It is felt by many that, although anatomical proof is of course lacking in unoperated cases, the mastoid is involved in a large percentage of instances of otitis media but that healing ensues without local necrosis or general complications.[5 3]

It must always be borne in mind that particularly as regards bone absorption, the roentgen changes lag appreciably behind the actual advance of disease (as shown histologically), although in streptococcic and in some pneumococcic infections osteolysis may be quite rapid. In hemorrhagic mastoiditis careful study of the deeper cells will usually demonstrate slight septum absorption, but there is considerable chance of error.

Attention has been called to the fact that although in adults in the presence of positive clinical indications for operation with no roentgen evidence of bone destruction the clinical evidence should decide the question, especially in case of limited pneumatization, it is the radiologist's duty to lay stress upon signs of advancing disease at variance with a stationary or apparently improving clinical condition or upon evidence of bone destruction in a dangerous area such as that adjacent to the sinus groove, near the tegmen, in the peritubal cells or in the petrous apex. It has been noted by numerous observers that this apparent contradiction in findings is especially likely to occur in streptococcus mucosus infections with their tendency to a proliferative form of inflammation,[12 5] and that complications are particularly likely to occur in this type of infection.[4 5] In general, however, it must be borne in mind that real improvement is a biological process, while the roentgen changes depicted here are anatomical and their improvement will always lag behind that of the former. Undue persistence of cloudiness after the acute stage means that a mucosal hyperplasia or a bony reparative change is occurring. It is more likely to occur in the streptococcus mucosus type of acute infection than in others, but clouding persisting for a period of a month in a well pneumatized mastoid should arouse suspicion of a specific infection[2] and the usual evidence of tuberculous disease should be looked for.

Infection or edema in tissues adjacent to the mastoid, as from furuncle or osteomyelitis of the temporal bone, will usually produce clouding of the mastoid area but this can usually be differentiated by study of films made in an antero-posterior plane and, as with the clouding which may be associated with a tumor in the vicinity or by hemorrhage into the cells by fracture, the history and clinical symptoms together with the lack of septum absorption will usually enable one to avoid error here.

It may be seen thus that there are many sources of error in drawing conclusions from the roentgen study of the acutely infected mastoid, some avoidable by accurate roentgen technique and some unavoidable because of structure, anatomy and individual peculiarities of the temporal bone, while still others which arise from reaction of bone to infection can be avoided only by giving due consideration to the known histo-pathology of mastoiditis.

A REPORT ON SCARLET FEVER IMMUNIZATION*

A. W. CAVINS, M. D.
TERRE HAUTE

In the course of providing medical care for the children at a local orphanage an effort has been made to immunize the children against contagion. This has been attempted thus far in the case of diphtheria and scarlet fever. The material used for tests and immunization was supplied by the City Board of Health.

Anti-diphtheritic measures are old stories to the present generation, but active immunization against scarlet fever is not so familiar. Consequently, one becomes desirous of learning the experience of others in this field. Let me quote from an article by Dr. Sue Thompson:[1]

"Now, after ten years, with much opposition, experimentation and trial, a certain permanence has become attached to scarlet fever immunization. After giving 49,166 doses of scarlet fever toxin in the Gary schools, how shall we answer these questions: Is the Dick test reliable? Is scarlet fever toxin a safe immunizing agent? Has its use been perfected sufficiently to be valuable?

"What is our relative protection today as compared with that of ten years ago against contracting scarlet fever? During the years from 1917 to 1925, 26 deaths occurred among 1,241 cases reported. In the following eight years, 1925 to 1933, since immunization has been carried on, 13 deaths occurred among 1,147 cases reported. During these intervals the school census gradually increased from 9,811 in 1917 to 28,032 in 1933. In Gary the death rate from scarlet fever per 100,000 was 3.5 in 1922 and 0.9 in 1932."

Personal communication from Dr. O. B. Nesbit, Gary school physician, confirms these results.

At Gary primary Dick tests were positive in 54 per cent. Of those rendered immune by injections of scarlet fever toxin, 81 per cent retained their immunity when retested after five years. Out of 8,645 negative to the primary test, and thus presumably immune, only 26 were reported as having scarlet fever afterward. Out of 10,000 actively immunized by doses of toxin, only nine later devel-

[17] McMahon, B. J.: Relation of Mastoid Structure to Extension of Mastoid Infection. *Ann. Otol., Rhin. and Laryngol.*, 1931, 40:53.

* Presented before the Vigo County Medical Society, May 14, 1935.

[1] *Medical Woman's Journal*, Vol. XLI, July 1934, pp. 175-178.

oped scarlet fever. To quote again from Dr. Thompson:

"The reaction to the Dick test in an individual may change. Errors or changes in a Dick test may occur from: First, impotent test material; second, improper amount or depth of the injection; third, errors in interpreting tests; fourth, change occurring in the person tested that permits him to be negative and change to positive."

Many fear reactions to the toxin. In my experience at the orphanage, with 22 cases, only one showed any systemic reaction, which appeared in the form of a headache after the first dose. This was controlled for subsequent doses by giving 0.2 cc. of a 1:1000 solution of epinephrin with each dose of toxin. Local reactions were of note in only one case.

The accompanying table gives the data for the experience with 119 cases at the orphanage. Since this work was begun there have been no cases of scarlet fever at this institution. Immunization was accomplished by giving five doses of toxin, increasing in strength from 500 to 80,000 skin-test doses, five to seven days apart. A sixth dose is given if the Dick test is still positive two weeks after the completion of the series of five doses.

Date	Primary Dick Tests		Dick-positive reactors treated	Dick Test 2 weeks after 5 doses toxin		Dick Test after sixth dose toxin		Percentage primarily positive	Percentage primarily negative
	+	—		+	—	+	—		
April 28-34	16	87	16						
June 19-34				3[2]	13				
Jan. 12-35						—[3]	2[3]		
June 19-34	—	1	—						
Oct. 26-34	6	9	6						
Dec. 14-34				2[4]	4				
Jan. 12-35						—	2		
Totals	22	97	22	5[5]	17	—[6]	4[6]	18.5	81.5

[1]Dates indicate performance of Dick Tests. Doses of toxin were begun a few days after tests were read.
[2]One of these was questionable, but was given the 6th dose anyhow, after which the test was definitely negative.
[3]One was unavailable for test.
[4]One of these was questionable, but was given 6th dose.
[5]Three certain, 2 questionable positives.
[6]One not traced for last test.

It will be noted that in this series the primary positives were 18.5 per cent, whereas in Gary they were 54 per cent. No explanation for this is offered. One could theorize about certain classes of society having a greater acquired immunity to the common infections, and also about the comparatively small number of cases in the series being reported, but it would not be germane to the purpose of this paper. The emphasis here is laid on the fact that all of the positive reactors were rendered negative by suitable doses of scarlet fever toxin, save for one case which could not be traced for the final test, and also on the fact that no really troublesome reactions were encountered.

674 Cherry St.

THE MANAGEMENT OF PATIENTS EXPOSED TO RABIES*

VERNE K. HARVEY, M. D.
CLYDE G. CULBERTSON, M. D.
INDIANAPOLIS

After July 1, 1935, the State Board of Health will not accept patients for Pasteur treatments.

The responsibility for administering the Pasteur treatment to indigent persons exposed to animals suspected of having rabies was placed on the State Board of Health by an act of the legislature in 1911. Under this law patients were treated by the state at Indianapolis. The state, in addition to giving the treatment, paid the traveling expenses, and for meals and lodging, and in the case of a child, the state paid the expenses of an attendant while at Indianapolis. In 1934, the total expense to the State Board of Health was $10,-255.87. The State Board of Health treated 808 persons in 1934. Of these, 631 resided in Marion county and 177 in other counties. Approximately half of the total expenditure was made on the 177 residing outside of Marion county, which is about $30 per patient in this group. It is estimated that such indigent persons can be treated at much less per capita by the county, city, or town in which they reside. Another advantage is that they would not be subjected to the inconvenience of living away from home for a period of two weeks in a rooming house.

The Free Antitoxin Law was amended in 1929 to include anti-rabic virus and in 1935 amended further to clarify it. The indigent patient can be treated at home by his family physician in most cases and the expense will have to be borne by the city, county, or town, depending upon the place of residence, in the same manner in which free diphtheria antitoxin is obtained. A further advantage in this change lies in the fact that when the local taxing unit feels the burden of the expense involved in giving free Pasteur treatment to so many persons, it will effect a more adequate control of stray dogs. Experience in a few other countries shows that by eliminating rabies in dogs, the whole rabies problem is controlled.

After July 1, 1935, all indigent persons exposed to animals suspected of having rabies will be a responsibility of the county, city, or town. The great majority of these persons will be cared for by their family physicians. The state will continue the examination of animal brains. We hope in this article that we may be able to pass on a few salient points of information gained at the State Board of Health from our experience with this problem.

SUSCEPTIBILITY

According to Parke and Williams, practically all warm-blooded animals are susceptible to rabies. The records of the State Board of Health show

* From the Indiana Division of Public Health.

that Negri bodies have been found in all species of domestic animals and in many wild animals indigenous to this state.

INCUBATION PERIOD

The virus, after a bite or exposure to a skin lesion, may travel in the nerves to the brain; therefore, the incubation period depends upon whether the exposure takes place on the body surface close to the brain. A bite on the bare skin is considered more dangerous than one through clothing. Deep wounds and severely lacerated wounds are dangerous, as also are wounds of the face, scalp, or neck. The incubation period may extend from fourteen days to a year or more, but usually from twenty to sixty days, depending largely upon the location of the exposure.

VIRUS

Rabies' virus is killed at 50 degrees centigrade for one hour or 60 degrees centigrade for 30 minutes. It is not killed by extreme cold but loses its strength when exposed to air and sunlight. If protected from heat, light, and air it retains its virulence for a long period. Five per cent formalin kills the virus in less than three hours; 1:1,000 bichloride of mercury kills the virus in one hour. Saliva-smeared fomites are considered of little danger. The virus of rabies is found in the saliva and other body fluids of an infected animal five days before the animal shows objective signs of the disease. Whenever a suspected animal bites or exposes a person to the saliva on any part of the body except the face, scalp, or neck, the animal should be quarantined and observed for fourteen days before Pasteur treatment is begun. In case of face, scalp, or neck bites the Pasteur treatment should be started as soon as possible since it requires fifteen days for immunization counting from the last injection.

FACTORS INVOLVED

The most important factor by far in the development of rabies is a bite from an infected animal. Bites from infected cats are considered more dangerous than from infected dogs, because of the fact that the bite is deeper and more penetrating. Few cases are said to have occurred from exposure to an abrasion or a previous skin lesion.

PREVENTION

The prevention of rabies consists of two important procedures, namely, the immediate treatment of the bite wound, and the administering of the Pasteur treatment. Rabies is a central nervous system disease but it must be remembered that a bite wound may be subject to an infection which may occur in any wound. The local appearance of the wound gives no clue to the presence or absence of rabies.

TREATMENT OF THE BITE WOUND

The most effective treatment is the application of fuming nitric acid applied with a glass rod to the lacerated tissues. Actual cautery is not considered effective. The application of phenol is not desirable.

PASTEUR PROPHYLACTIC TREATMENT

The Pasteur treatment produces an active immunity by means of a modified attenuated virus given in the form of emulsion of rabbit cord. The injections are given daily in the subcutaneous tissues of the abdomen. Fourteen injections are usually considered sufficient. The patient may continue with his regular duties while under treatment, observing general hygienic measures usually followed while under a physician's care.

Immediate Pasteur treatment should be started on all cases of face, scalp, or neck bites regardless of the condition of the suspected animal and regardless of the laboratory report. Valuable time may be lost in waiting on a laboratory report in this type of bite. Pasteur treatment for bites in other locations on the body may be deferred until the status of the biting animal has been determined by observation. If the suspected animal is apparently normal at the end of two weeks from the date of the bite, the patient may be dismissed without Pasteur treatment. If during the observation period of the animal it should show objective signs of illness or should escape, Pasteur treatment should be administered at once. If the animal should escape capture, or is killed immediately and a negative laboratory report is received, or if the animal cannot be identified by the patient, then the Pasteur treatment should be started.

EXPOSURE OTHER THAN BITES

1. All persons having skin lesions exposed to the wet, fresh saliva of a suspected animal should be treated.

2. Young children living in close contact with a rabid animal should in most instances be considered exposed and treated accordingly.

3. Animals suspected of having rabies should be quarantined and not killed where this is practicable. If the animal must be killed as an immediate control measure, it should be done in a way that will not injure the brain, for that would render it useless for laboratory examination.

COMPLICATIONS OF PASTEUR TREATMENT

Local: Local reactions usually consist of redness and induration. In our experience abscesses have not occurred.

General: Post-rabies-vaccine-encephalitis and paralysis of varying types have been reported in varying percentages. The average of these is approximately one case in 3,000 treated. This type of reaction may be fatal.

In our experience acute infections, pregnancy, or the extremes of age have not been considered a contraindication for the Pasteur treatment.

THE PROSTATE

A. JEROME SPARKS M. D.
FORT WAYNE

Transurethral prostatic resection for the relief of urinary obstruction is now a well established procedure, and is being done by most urologists. Much has been written about it in the past several years, and today, wherever you find a group of urologists, you will find it to be the main subject under discussion.

Nowhere in the literature, to my knowledge, has it been the object of the writers to convey the idea that the operation is of a minor nature and without risk. Yet that impression somehow exists among many practitioners. The lay press, through its health columns, has conveyed the same idea to the laity, and in one instance I recall that the writer left the impression that the patient could walk into the doctor's office, have his prostate whittled out, and walk home happily. While the profession generally has not reached the latter state of optimism regarding the simplicity of the operation and the morbidity resulting from it, nevertheless I believe that the economic side of the subject from this viewpoint has not been fully told. All writers, almost without exception, dwell upon the short hospitalization period of the patients treated by this method as compared to those treated by open operation (a fact which cannot be denied), but that other factors intervene which make the hospitalization expense insignificant by comparison is forgotten for the moment. We must be aware of all the facts.

Every urologist who does transurethral surgery has had experiences similar to the following: A prostatic patient comes in, either upon the advice of his family physician or of his own accord. He has been told of the "new operation" requiring no external cuts, a short stay in the hospital, and so forth. He is ready to enter immediately and get it over with. Then he is told about the "buts" and "ifs" and the "what nots," and his enthusiasm wanes. After all, it is not quite as simple as he has been led to believe. There is some risk involved. Well, he must think it over.

FACTS AND PROBLEMS

A few years ago I started out conservatively, but enthusiastically, expecting to do most of the prostatectomies by the transurethral route. Very soon it was learned that this could not be done. There were no unpleasant accidents, major complications, or immediate post-operative deaths, but the morbidity in some of the cases treated by this method was greater than in the suprapubic operation. I continued my efforts with but little change.

Because of the splendid reports of such men as Alcock, Caulk, Davis, McCarthy, and others, it was believed that perhaps the difficulties were due to errors in technique. Therefore, at the meeting of the North Central Branch of the American Urological Association in November, 1934, very careful inquiries were made of a number of urologists, and it was found, to my surprise, that my difficulties were experienced by many others. Thus, my views on this subject were strengthened.

In evaluating any surgical procedure, certain factors must be taken into consideration:

(a) End result;
(b) Mortality rate;
(c) Morbidity, and, as a consequence, the financial loss to the patient.

To a great extent, of course, all of these will depend upon the ability of the individual operator to carry out the procedure in question. I find that, in my hands, cases for transurethral surgery are best divided into two groups:

(A) Those unquestionably suited for this method. These cases include median bars, bladder neck contractures, middle lobe hypertrophy of moderate size, and lateral lobe hypertrophies not too large or too elongated. Cases of this type can almost always be relieved in one sitting and the result is excellent. Because drainage of the bladder is complete, infection is never troublesome. The patient's stay in the hospital is short and convalescence is rapid. The outcome is always a pleasure to the patient and surgeon.

(B) Those cases which I consider ordinarily unsuited for transurethral surgery: Cases of very large, intravesical, middle lobe hypertrophy, and lateral lobe hypertrophies which cause tremendous elongation of the urethra. Many of these must be operated two, three or even a greater number of times to obtain a satisfactory result. Because of the incomplete drainage in the interim, infection is a difficult and serious problem. The stay in the hospital is not only not shortened, but is often longer than with the open operation. The problem of cleaning up the infection is a difficult one, and the end result is often not one to make the operator especially proud. Finally, the cost to the patient—the point so much emphasized—is considerably greater.

With these points in mind, I classify candidates for operation as: 1. relatively young men, good surgical risks; 2. poor surgical risks (these may be in the younger group or men of very advanced age); 3. prostatic malignancies.

Thus classified, the problem of selection becomes very simple and, to me, logical.

For those in group 1 who are of the type for resection (group A) the operation is recommended gladly. As mentioned before, it is in these cases that it does everything that is said about it. On the other hand, if the enlargement falls in group B, the open operation is unhesitatingly advised because the end result is more certain; the total expense to the patient is no greater and often less; and, in experienced hands, there is no appreciable difference in the mortality figures.

For the cases in group 2, the poor risks, the problem is entirely different. Here the question of mortality is of first importance and time loss and expense are secondary. One is justified, therefore, in doing the transurethral operation whenever possible, even if it must be repeated three or four times, because the risk is greatly lessened by this method. I feel that continued drainage by the suprapubic route until the desired functional result is obtained decreases markedly the danger from infection and adds to the comfort of the patient.

For treating prostatic cancer the transurethral operation is the method par excellence. Even if it must be repeated at relatively frequent intervals, it is much more desirable than permanent suprapubic drainage with all its inconveniences. Furthermore, the growth can often be arrested by perineal implantations of radium, making frequently repeated operations unnecessary.

SUMMARY AND CONCLUSIONS

1. Transurethral prostatic resection is too often considered a very minor procedure without risk. This is far from the truth. Those who do the operation know that it often becomes a major problem with serious consequences.

2. In the good surgical risks with very large prostates, open operation is the most expedient and often the least costly to the patient. In these cases there is no appreciable difference in mortality figures with the two methods.

3. For the poor surgical risks, transurethral prostatic resection is the method of choice wherever it can be done. Where repeated operations are necessary, suprapubic drainage decreases the danger from infection and adds to the comfort of the patient.

4. For obstruction from prostatic malignancies, transurethral prostatic resection is the treatment par excellence.

Wayne Pharmacal Bldg.

ABSTRACTS

OAKLAND COUNTY, MICH., MEDICAL EMERGENCY RELIEF

The cooperation of physicians, dentists, nurses and druggists in the County Emergency Welfare Administration in Oakland County, Mich., has resulted in a system of medical care for relief clients so comprehensive and satisfactory to all served that its description may be helpful to other localities. The plan is based on a faithful adherence to the intent as well as to the wording of FERA Rules and Regulations No. 7, in the preparation of which, it will be remembered, the American Medical Association participated. A "medical manual" has been issued, containing a description of the plan, all the blanks used, and standard instructions for all those concerned. In the introduction the medical director states that "the reason why we feel that this plan is successful thus far is the utter lack or absence of complaints from the welfare clients, and the universal approval of physicians and dentists."

Among the principles set forth as necessary to "be considered before any medical plan will function properly" are free choice of physician, cooperation of the county medical society, prompt payment for services rendered, no dictation of methods of treatment by laymen, and a medical advisory committee that can and will discipline the members of the profession more effectively than others outside the profession.

A characteristic of this plan, which is a deviation from the practice common elsewhere in emergency relief, is that any person who presents to any physician a card stating that he is on relief is immediately given the medical care needed. The physician reports the service furnished within seven days and receives payment usually within thirty days. This procedure places more responsibility on the physician and secures quicker action than when medical service must always follow a social service investigation. It also does away with any possible influence by a social service worker in the selection of a physician.

The spirit of the understanding is expressed in the statement that "social problems are one thing and medical problems another, and it would seem that by tending strictly to their own field both groups would be fairly well occupied during such times as these."

The medical work is under the direct supervision of a medical director who is a physician. It is made clear that the medical director "should serve in an administrative capacity entirely. It should not be his duty to dictate what diagnosis is made by the family physician or to criticize in any manner the type of treatment without first consulting the advisory committee appointed by the county medical society. In other words, he should refrain from medical dictatorship."

All disputes as to medical matters go before the medical advisory committee of the county medical society. There are special regulations to prevent imposition by clients who demand excessive medical service.

The fee schedule, which "is intended as a guide only," is about one half of the minimum fees usually charged in the community. All drugs must be prescribed by the physician and must be taken from the U. S. P. or N. F. unless special authorization is granted. Except in case of emergency, serious operations require consultation and special authorization. The arrangements as to dental care are practically the same as those for medical service. Nursing, surgical appliances, glasses, special diets and other things considered necessary by the attending physician are provided, also after special authorization.

The cost of the plan has been less than under previous methods of giving relief. In 1934 a total "gross case load" of 15,548 families was given medical care. This case load varied from 5,983 in June to 10,566 in December. The average cost for medical service for 1934 per family per month was $0.9523 and the average cost per person was $0.2506. The total payments to physicians for the year were $89,729.74 and the total cost for all kinds of medical, dental, nursing and other service, excluding drugs and glasses, for which the audit is not yet complete, was $116,881.06. Laboratory service was furnished by the county hospital without charge. A letter signed by the board of directors of the Oakland County Medical Society says "We feel that the administration of medical poor relief in Oakland County has come as close to approximating the ideal as it is possible to come in the first year of any program."—*Jour. A. M. A.*, April 13, 1935.

UNILATERAL SUBLUXATIONS OF CERVICAL VERTEBRAE WITHOUT ASSOCIATED FRACTURE

Since January, 1929, BARBARA B. STIMSON and PAUL C. SWENSON, New York (*Journal A. M. A.*, May 4, 1935), have seen sixty-six cases of unilateral subluxation of the cervical vertebrae without associated fracture. They stress the composite picture presented by the sixty-six cases: a relatively young adult who seeks relief for stiffness and pain in the neck within twenty-four hours after a mild twist or jerk of the head and who holds his head tilted to one side and cannot bend it to the opposite side. Adequate roentgenograms are necessary for conclusive diagnosis. Treatment is relatively simple after the diagnosis has been established.

THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION
DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

Office of Publication: 1021 Hume Mansur Bldg., Indianapolis.
Editor: E. M. SHANKLIN, M. D., 5141 Hohman Avenue, Hammond, Ind.
Managing Editor: THOMAS A. HENDRICKS, 1021 Hume Mansur Building, Indianapolis

Editorial Board:
F. T. ROMBERGER, M. D., Lafayette.
T. B. RICE, M. D., Indianapolis.
PIERCE MACKENZIE, M. D., Evansville.
L. P. HARSHMAN, M. D., Fort Wayne.
ERNEST RUPEL, M. D., Indianapolis.

JUNE, 1935

EDITORIALS

MATERNAL MORTALITY

This very live subject has been discussed in medical literature for some time past, but gradually it has assumed greater proportions, until now the profession and the laity are quite awakened to its importance, and the profession is undertaking various means to bring about much-desired changes in existing conditions.

Some time ago a special committee of New York physicians released a report of a study conducted in that city, and some rather severe charges were laid at the door of the medical profession, some of which were justifiable. These findings were given wide notice in the lay press and served to arouse the public to the necessity of pre-natal care.

Now comes the report of a federal investigation, published by the Children's Bureau, a division of the United States Department of Labor. This exhaustive report, based on the returns of deaths and births during the past few years, affords material for deep reflection, and while we do not have available space to enter into a complete discussion of the report, there are certain recommendations which warrant special comment.

The recommendations are predicated on certain postulates laid down by a committee, and most of these postulates seem well founded. It is maintained, first, that maternal deaths are due in a large part to controllable causes and that the medical profession must know the facts, then take appropriate and decisive action. Physicians must have the responsibility for leadership in both the medical and community programs for such control. Further, it is set forth that if physicians do not assume this leadership, it will necessarily be lodged elsewhere. These recommendations, then, are addressed both to physicians and to the general public. Addressing the profession, the committee says that we must assume leadership by:

1. Informing the public that maternal deaths are due to controllable causes.
2. Every mother must have adequate pre-natal, delivery, and postpartum care.
3. The public must be informed as to what is adequate maternal care.
4. Communities must be so organized that such care may be had.
5. Warnings as to the dangers of either spontaneous or induced abortions.

Then comes a series of recommendations to physicians, covering the fundamentals of obstetrical care, beginning with better clinical training in our schools, and including postgraduate teaching. The dangers of various procedures are not overlooked, including the indiscriminate use of pituitrin. The danger to mothers from carriers of infection is especially stressed, while the value of blood transfusion is given a proper place.

The general public is advised on many points, among which the necessity of placing these cases in the hands of competent medical advisers, early, is especially stressed. The danger of death or serious illness from abortion is given particular attention.

The report includes several pages of statistics which are deserving of special notice. The fact that the mortality rate is higher in urban than in rural centers affords food for thought, though the reason for this may rather readily be understood in most instances.

Indiana does not appear in this study of fifteen states, but we must conclude that we are no exception to this cross section of conditions as they exist elsewhere in our country. We presume that this report is available to physicians, and we urgently recommend that all who are engaged in obstetrical practice get a copy and study it most thoroughly.

ANIMAL EXPERIMENTATION

In the February-March number of *The New Humanist*, a most interesting little journal hitherto unknown to us, we discover a very clever presentation of a refutation of the arguments of the anti-vivisectionists, written by Maurice B. Visscher, professor of physiology and head of that department in the University of Illinois. Like many men at the head of such departments in our larger universities, Professor Visscher is not a physician, hence cannot be said to be biased from the standpoint of our profession.

Dr. Visscher declares that the anti-vivisection movement is growing, attributing this to its having recently been supplied with larger funds, citing the fact that two bequests, totaling more than four million dollars, have come into the coffers of various branches of this organization. He strikes at the very heart of the question when he says,

"The anti-vivisection movement is essentially unscientific. It poses in a false cloak of humanitarianism although it is in its essence anti-humanitarian. It seeks to disguise true character by playing on various susceptible human emotions. The fire of the movement is fanned to a blaze by persons with selfish economic motives. These promoters incite impressionable people to eruption over conditions that exist largely in their own imaginations."

Practically all progress in scientific medicine, Dr. Visscher says, is due directly or indirectly to animal experimentation. A hundred years ago the life expectancy was thirty years; today it is more than fifty-eight years. This increase in life span is due to the conquest of certain of the dread diseases which formerly exacted enormous tolls.

The "antis" seem to take great pleasure in citing the fact that the death rate from diabetes has not been lessened since the advent of insulin, yet they do not go on to admit that before we had this useful drug, the victims of this disease died soon after acquiring it; now they lead long and useful lives, even though it may eventually cause death. "In other words," say Visscher, "the medical profession is being maligned for having prolonged the lives of more persons to ripe old age."

We join with Dr. Visscher in wondering just who writes the anti-vivisection material that flaunts its face in the pages of our sensation-seeking press. "For such persons to set themselves up as experts in a field in which they have absolutely no experience is little short of insanity." Following that statement, Dr. Visscher launches into a very sane discussion of what the "antis" seem to like to talk about, the ethical justification of what they term vivisection, and his handling of this phase of the subject is a masterly presentation. He concludes by citing a long list of notables who have given their endorsements to animal experimentation as it is practiced today. Clarence Darrow, once heading the list of those opposed to animal experimentation, wrote to Professor Carlson, head of the department of physiology of the University of Chicago, to the effect that he was satisfied that vivisection does not add to the pain of animal life.

"The price of freedom is said to be eternal vigilance. The price of progress is surely an eternal struggle against the forces of ignorance, bigotry, and self-interest." Thus, Dr. Visscher concludes an article which we most heartily commend. We hope that our readers may find it convenient to obtain and read the entire article.[1]

TOURIST CAMPS

The advent of the modern automobile brought many problems that hitherto had not been considered, among them the regulation of tourist camps. In the formative period of this ever-increasing commodity, most anything served as a tourist camp. A bit of shade, some sort of provision for drinking water, a Chic Sale model or two, and the camp was complete. Later on shacks made their appearance alongside the road which, in turn, gave way to the cabins now dotting the landscape. Health authorities, at once concerned, were at a loss to know what to do about it; there were no provisions covering these affairs in the existing laws, save in a general way, hence the operators did pretty much as they pleased.

The 1935 session of the Indiana legislature enacted a specific law covering tourist camps, a law that promises much in the way of improvement of sanitation. Not only does the law protect the tourist, but the operator of the camp is protected against many evils that have been prevalent in the past. The transient is assured clean quarters, safe water to drink, pure and wholesome food to eat. The camp owner is assured that he will be paid his rentals, that his guests will report any sickness in their parties, and that his camp will be left in good condition.

After defining the meaning of "tourist camp," and this definition applies whether a fee is exacted or not, the law sets out that each owner must obtain a license to operate, the fee varying according to the size of the camp. The law also provides for a fine for operating a camp without license. Applications for license are made to the Indiana Division of Public Health, which organization makes an inspection of the property; the license is for one year.

Campers are required to dispose of all garbage and refuse before leaving the camp and to report any and all cases of illness in their party. Should a camper leave without paying his rental he may be apprehended and fined in the sum of $25.

Tourist camps have come to be a necessity. Each year more and more travelers use these camps, and it is proper that the state should exercise some degree of supervision over them. We believe the law well covers the situation for the best interests of all concerned. We trust its enforcement will be speedily and efficiently carried out.

JUVENILE REFRACTIONS

One of the bulletins recently issued by our Bureau of Publicity directed the attention of lay readers to the importance of careful refraction of the eyes of children; it was carefully pointed out that such refractions can not be correctly done without the aid of so-called "drops," this notwithstanding the contentions of our optometric friends that drops are not necessary and, too, are harmful.

The article went on to say that in Germany opticians are forbidden to fill prescriptions for children's glasses without the express order of a physician. Some of our higher class opticians

[1] New Humanist. 25c. 330 S. Dearborn, Chicago.

have come to recognize the necessity of using complete mydriasis in such examinations, the members of the Guild of Prescription Opticians, in particular; members of this organization, even though they conduct a refracting business in addition to the filling of prescriptions, flatly refuse to attempt an examination of the eyes of children, and such cases are referred to the oculist.

Not alone does the laity need a bit of education in this regard: some of our professional brethren could well take some wholesome advice along the same lines. Too many of our folks are in the habit of saying "better have this child's eyes 'tested.'" with no suggestions as to the quality of the "testing."

We have no particular complaint when an adult goes where he wishes to get his glasses, for he is old enough to know whether he gets results; but a child, depending on his parents to do the thing that is best for him, may suffer irreparable damage, in case he is fitted by one grossly incompetent. All oculists see many of these cases and considerable space could be consumed in detailing such case histories.

In connection with the sight saving classes, now so common in many of our schools, we find numerous incidents bearing out this point. We recently had a communication from a school physician who was much perturbed because a township trustee had appointed a local optometrist to take care of the eyes of the children of indigents. One case he cited was that of a myope who, because of his poor vision, even when corrected by this optometrist, was continued in a special class. An examination by an oculist showed that, with proper glasses, this little chap had almost normal vision, but, due to the political complex of the matter, the trustee continues to employ the optometrist.

It is a very common experience, in these days of the "subnormal" room in our schools, to find little youngsters there because of defective vision, some of whom have had attention at the hands of the optometrists. We recall one instance in which a child of nine years was about to be transferred to the sub-normal room. A school nurse, however, became interested in the case and had a Binet test made, which showed the child to be of practically normal mentality. This child had been gone over by an optometrist two or three times, each time being declared to have normal vision. A refraction, under atropine, showed an enormous degree of hyperopia; the error was properly corrected and the child escaped the ignominy of being sent to the "nut" class.

The propaganda against "drops" is fostered by those who are not permitted to use them, but in the past few years this criticism has not been so open. Atropine, properly used, does not harm the eyes of these little tots; on the other hand it assures a more complete examination and a more adequate correction than can be had by any other means. We urge our members to insist upon a complete, competent eye examination in all children who are suspected of having symptoms of eye strain.

THE PROPOSED STATE WELFARE ACT

Just as bad in many respects as it was feared it would be, the "State Welfare Act," widely increasing the power of social service workers, is drawn, and ready for introduction when the legislature meets again either in special session or at the regular time almost two years hence. This act was drawn by a special committee of three legislators and based upon recommendations in the report of the Committee on the Study of Governmental Economy of the State of Indiana which was discussed in the last issue of THE JOURNAL.

Some of the dog hair and dynamite contained in the report has been eliminated in drafting the act, but the same fundamental objections voiced to the original report hold good for the act as prepared.

The bill creates a separate and distinct department to be known as "The State Department of Public Welfare" and creates a county welfare set-up "coordinating and consolidating the various welfare agencies including various social agencies and activities for the promotion of child welfare, relief of the indigent and aged and other benevolent agencies and activities."

The bill abolishes the boards of trustees of state hospitals and puts all these powers in the State Department of Public Welfare under a "Public Welfare Commission" consisting of the governor and eight additional members to be appointed by the governor. This commission will name the state welfare administrator with the approval of the governor.

"The department is hereby designated as the State Authority for the administration or supervision of any function of public welfare, social security assistance and relief which may be provided by an Act of the Congress of the United States in order to secure the benefits of Federal Aid," reads the act.

Thus a perfect set-up would be created to place the practice of medicine in Indiana directly in control of a lay group dominated by social service workers should a federal system of sickness insurance ever be instituted. In addition to the state institutions, the new state welfare department would, according to the act, take over each "and every county orphans' home, county children's home, county hospital for the insane, or like county establishment or institution by whatsoever name or kind, as is situated in any county of the state, and shall continue thereafter to supervise, manage, operate and conduct all the operations and functionings thereof, making all necessary, expedient, permanent or temporary, stationary or ambulatory appointments."

That takes in plenty of territory, but more is to come. The municipal institutions may transfer their properties to the State Welfare Department. This pretty well covers the Hoosier waterfront, and just about all in-between spots from Lake Michigan to the Ohio River. The act says nothing about general county or city hospitals, but such an exemption should be demanded specifically by the medical profession when and if the bill is introduced, or these, too, may come under a statewide social welfare control.

Now comes the county set-up which carries substantially the same provisions in the prepared act to which THE JOURNAL last month objected in the Governmental Economy Report, namely, that social service workers would have full and uncontrolled direction of welfare and many health activities in the counties. A county board of public welfare of five members is appointed by the county council, which shall select and appoint a *director from a list of eligible persons maintained by the state commission.* The director appoints assistants and takes over powers of the township trustees and overseers of the poor.

Finally, the act provides:

> "The department and commission as to the state at large, and the welfare counties and county welfare boards as to the several counties, shall each in their respective territories, if so required by any act of Congress, be the medium as between the federal government and the state, and between the federal government and the state, and the state and the counties; and said department, commission, welfare counties and county welfare boards are specifically authorized and empowered to do all such things, take all such steps, and within lawful authority so to do, incur any indebtedness as may be necessary, proper or expedient to provide and bring to the state, the several welfare counties, and citizens of the state, any assistance, relief, aid, support and help as may be, or, as may become available from any action or provision by the federal government."

Here, gentlemen, is your groundwork which, by a simple twist of the legislative wrist, may bring the medical profession under complete domination of lay social service workers—but, again, we repeat that we don't believe the social service workers will get away with it when the public and the members of the General Assembly realize what may happen.

IF YOUR DUES ARE NOT PAID FOR 1935, THIS IS THE LAST ISSUE OF THE JOURNAL THAT YOU WILL RECEIVE.

EDITORIAL NOTES

DO NOT forget to pay your narcotic permit fee before July first. Physicians usually are assessed as class four and five, for which the fee is one dollar, payable to the Collector of Internal Revenue, Federal Building, Indianapolis.

THE JOURNAL needs your active support in patronizing JOURNAL advertisers, and in *letting them know that you do so.* Many of the advertisements carry coupons and you will be conferring a threefold favor—to yourself, to THE JOURNAL, and to the advertisers—if you will use those coupons.

CONCERNING the question of automobile accidents, which subject we have rather frequently discussed, we noted a recent comment from the interstate commerce commission. It was to the effect that during 1934 drivers of 1,287 automobiles ran their cars *into the sides of railroad trains.* Further, that during the same year there were 3,322 highway grade crossing accidents resulting in death for 287 persons and injury for 1,865 others. We still maintain that many of these accidents are wholly preventable.

FROM the Nebraska *State Medical Journal* for April 1935 we quote the following trite comment: "Coincident with the taking of an Omaha girl suffering from a diaphragmatic hernia to a Fall River surgeon for operation, to which a lot of newspaper publicity was given, an infant suffering from diaphragmatic hernia was operated on in her home town, Omaha, with equally good results. One can not help noticing that in the one case the name of the Fall River surgeon was heralded all over the United States while in the case of the infant, the surgeon remains anonymous."

MR. DON K. MARTIN, for many years the very efficient executive secretary and general counsel of the Ohio State Medical Association, as well as editor-manager of their Journal, recently tendered his resignation to the Association Council. With much regret the Council accepted the resignation, and Mr. Martin has become manager of the Ohio Manufacturers Association. Don Martin has made a signal success of his connections with the Ohio organization; in the various national meetings he made many friends all of whom will miss his genial presence in such gatherings in the future. He will be missed especially at the annual conference of secretaries and editors. We wish Don every success in his new field and take this occasion to thank him for his many contributions to organized medicine.

WE WOULD again urge our county society secretaries to make a June drive for new members; the summer season is upon us and during that time the average doctor seems to have little time to consider society membership. THE JOURNAL will cooperate in such a campaign, as will the headquarters staff. THE JOURNAL will be mailed—complimentarily—for a period of three months to those prospective members whose names are submitted by county society secretaries. Let's all boost a bit and see if we cannot have three thousand members before the annual meeting at Gary.

THE attorney general of Illinois recently has made a ruling that will be of interest to Indiana physicians located in daylight savings zones, since it is apparent that it may well apply to our state as well as Illinois: "In drafting the Vital Statistics Act, the legislature of this state in considering the date of birth could only have meant that said date of birth was to be fixed in accordance with Standard Time, and local ordinances of any city, town, or village in the state would not be in the mind of the General Assembly when passing laws statewide in their scope and application."

PHYSICIANS are no less human (and gullible) than other classes of people, and this observation is prompted by the knowledge that countless numbers of Indiana physicians responded, some blithely and some shamefacedly, to the dime and dollar chain letter schemes. Perhaps those who got no return from their dollar had a dollar's worth of fun, but we are inclined to believe that those who had the fun were those who declined with thanks, and watched the "easy marks" send one lonely little dollar out in the hope that it would return a thousand-fold. Chimerical schemes are attractive—even to such intelligent people as physicians!

FIVE physicians who have won the title of president of the Indiana State Medical Association attended the meeting of the Eleventh District Medical Society at Delphi, May fifteenth. They were Drs. Leach, Padgett, Crockett, Daniels, and McCully. This is only one example of the interest that existed in district meetings this year. All were extraordinarily well attended; all presented programs of unusual merit; and all were forceful testimonials to the fact that the physician is vitally interested in his own future and that of his profession. Gradually, we are awakening to the responsibilities and crying needs of our own profession. Let those who would trod upon us take heed!

THE Committee on Interstate Cooperation of the National University Extension Association has announced as its national debate proposition for next year, the following subject: "Resolved: That the several states should enact legislation providing for a system of complete medical service available to all citizens at public expense." This will mean that the subject will be debated by more than 100,000 students in high schools, colleges, and universities throughout the nation, and will be heard by audiences in auditoriums and over the radio. The arguments will be interesting to all physicians, and it is always possible that really worthwhile ideas may come from such discussions.

EDITOR CHARLES J. WHALEN in the *Illinois State Medical Journal*, under the heading, "Every Ethical Physician in the State Should Belong to the Illinois State Medical Society," aptly states some truisms which apply quite as well to Indiana as to Illinois: "In numbers there is strength. United we stand, divided we fall. A united medical profession can brush away any and all obstacles. It is next to impossible to find a really successful physician who has obtained fame outside the pale of organized medicine. Are all the eligible physicians in your county members of your local medical society? If non-members of local society are discovered get busy and try to induce them to join at the earliest opportunity."

IN this issue, on page 296, we publish Dr. R. Clyde White's reply to an editorial, "Dog Hair and Dynamite," which appeared in our May issue. We want our readers to have both sides to consider, when and if the proposed welfare reorganization act is presented to our state legislative body. Especially we want you to note Dr. White's recommendation that a committee from our own organization and one from the organization of social service workers might find it profitable to hold occasional conferences to promote better understanding between the groups. The suggestion is a splendid one and should not be forgotten. Our reactions to the proposed bill are set forth in an editorial in this issue. Read these articles carefully and thoughtfully; they are of interest to you as a physician who cares about the future.

SOME of our Indiana doctors have had bitter experiences in attempting to obtain just fees from so-called "benefit" associations of one kind or another. We suggest something like the following, to be hung in a conspicuous place in the office, to avoid unpleasant controversies:

NOTICE

THE PHYSICIAN IN THIS OFFICE WILL NOT CONSIDER ANY ARRANGEMENT OF PAYMENT FOR SERVICES RENDERED THROUGH ANY "BENEFIT" ASSOCIATION UNLESS SUCH PAYMENTS ARE GUARANTEED IN ADVANCE, IN WRITING, PROPERLY NOTARIZED, AND SIGNED BY AN AUTHORIZED OFFICER OF THAT ASSOCIATION.

THE pediatricians of the state are organized to hold postgraduate programs in any district in the state on request. Several of such meetings have been held in the past year, and were thoroughly appreciated by those who attended. The last meeting consisted of clinics beginning at ten o'clock in the morning, luncheon at noon, followed by six lectures in the afternoon on the newer pediatric discoveries and methods. The program was completed at four o'clock in the afternoon. The pediatricians are willing to reproduce this postgraduate teaching by bringing the lectures to your door, or if it is preferred, you may arrange your own program, and speakers will be supplied as desired. Dr. Louis Segar, 226 Hume Mansur Building, Indianapolis, is chairman of the Committee on Postgraduate Teaching, and will be glad to arrange a meeting for your district if requested. Such a meeting might be enjoyed this summer when there is less demand on one's time.

THE American Association for Social Security seems to have climbed upon the back of the editor of the *New York State Journal of Medicine*, because that magazine published an article entitled "Will America Copy Germany's Mistakes?" The social security folk seem to feel that the New York journal played into the hands of the Nazi propagandists in using the article. In an editorial in their issue of May first, the editor disclaims any such thing, stating that the article in question expressed opinions worthy of study by American physicians. We note that many of our state journals used this or a similar article; in fact, it was submitted to us but for some reason or other (not that we are particularly astute in such matters) we decided not to use it. Not uncommonly do we receive material which, on first glance, would seem to be good copy, only to discover evidence of some sort of a Senegambian lurking about.

THE Columbia Broadcasting System has sent out an announcement to the public, to advertisers, and to advertising agencies, telling of plans to eliminate objectionable advertising, and to limit the time allotted for commercial announcements. This is welcome news, and doubly welcome is the information that there will be permitted "no broadcasting for any product which describes graphically or repellently any internal bodily functions, symptomatic results of internal disturbances, or matters which are generally not considered acceptable topics in social groups." Thus will all references to laxatives be eliminated. More attention is promised to the programs intended for children, with a view to giving youngsters inspiration "toward socially useful and laudable ideals." A child psychologist will be engaged to assist in this work. We believe this is commendable progress, and the efforts of this company will be appreciated by all who enjoy radio programs. Physicians will be pleased to know that the future holds promise of having all unethical medical advertising omitted from radio broadcasting.

WITH the coming of June one's thoughts more or less automatically revert to vacations; whether this little respite from our daily doings takes the form of a golfing spree, a pursuit of the finny tribe, or nothing more than an automobile jaunt over the country, it is a most necessary thing to physicians. Of all folks who need a vacation, we believe our folks come first. To the casual lay observer it would appear that the practice of medicine, whether it be urban or rural, is a "soft snap"; it is anything else—it is a job, and a man's sized job, at that. For some years past we have made the observation that too many doctors snap out, suddenly, with some form of heart trouble; coronary disease of one form or another seems to take the greatest toll. There may be no corollary here, but we do believe that these heart cases are much more numerous among those who make a drudge of their profession. By all means, take a vacation this year—every year; two or three times a year will be better—you need it and your business needs it.

WHILE it is true that our present workmen's compensation law leaves much to be desired, from a medical standpoint, yet it seems that we Hoosiers are more fortunate than our brethren in some of the other states. Medical journals of late have had much to say on the subject, many complaints being registered because of the unfairness of many of these laws to the profession. New York, in particular, seems to be mightily pleased over the fact that the recent legislature of the state has made some drastic changes in their law, changes that would seem to operate much to the benefit of the medical profession. One striking change is that physicians wishing to treat compensation cases shall register with their county medical societies. In making these applications, the physician must set forth his training and experience. It is further provided that if any county society fails to set up a program in accord with the new law within a period of two months, then the state board shall appoint a local committee for the purpose. Whatever may be the outcome, the fact that the state has given the county society full recognition is in itself quite something.

THE Fort Wayne Medical Society, after a prolonged study of the problem, has arrived at definite conclusions in the matter of the campaign at present being sponsored by the State Division of Public Health, looking toward the lowering of the incidence and the mortality of diphtheria. In a communication to the members the committee in charge

recommends that the work be undertaken at once rather than to await the awarding of monies from President Roosevelt's fund of $4,800,000,000 as was proposed by the Citizens Committee of One Hundred. The plan contemplates carrying on the work by the *family physician*, either in the office or at the home. The visiting nurses have been strongly advised not to refer cases to any particular physician, even though asked by the parents. It is further suggested that while this is a diphtheria immunization campaign, the physicians might do a little smallpox immunization on the side. In concluding the report to the membership the committee aptly says, "The future of the practicing physician lies largely in preventive medicine. The general public desires it but as yet we have not sold them thoroughly. The success of this campaign we believe will be a stepping stone toward other preventing measures in which the family physician can share."

A CLIPPING from the *Illinois Medical Journal* for May, 1935, should be of much interest to medical men as well as dentists; we have long maintained that restrictions as to advertising were entirely possible, via the law; that opinion seems to be upheld in the following decision of the United States Supreme Court:

UNITED STATES SUPREME COURT UPHOLDS BAN ON DENTIST ADVERTISING

Washington, D. C., April 4.—The U. S. Supreme Court has ruled that the Oregon law prohibiting dentists from advertising is constitutional.

The opinion, delivered by Chief Justice Hughes, stated that the Oregon law is not an arbitrary interference with liberty and property, and added that the public should be protected against practices which "tend to demoralize the profession." No dissent was made to the opinion.

The case concerned Harry Semler, a Portland dentist, who contended that the 1933 act does not operate for the welfare of the general public, but for the financial benefit of a part of the dental profession, at the expense of the public.

DOWN in Graysville, Sullivan County, Indiana, there stands a modest stone, marking the grave of Jane Todd Crawford, until rather recently one of the forgotten heroines of Indiana, famed because she was the first woman to undergo an ovariotomy, this at the hands of Dr. Ephraim McDowell of Kentucky. For many years this pioneer surgeon has been accorded all due praise for his daring treatment of an ovarian tumor, but it remained for the Woman's Auxilary of the Kentucky State Medical Society, with Mrs. Arthur T. McCormack as its leading spirit, to accord deserved honor to Jane Todd Crawford. On May thirtieth, at Danville, Kentucky, a monument erected in memory of this woman was unveiled in McDowell Park. The unveiling ceremonies included a memorial address by Dr. Stewart Roberts of Atlanta, and brief addresses by Dr. Morris Fishbein of Chicago, Judge Basil Richardson of the Kentucky Court of Appeals, and Mrs. A. T. McCormack of Louisville. Earth from the grave of Jane Todd Crawford was deposited at the monument by Dr. W. N. Wishard of Indianapolis. The ceremonies were followed by an inspection of the old McDowell home. Thus, after a long span of years, Jane Todd Crawford comes into her own; thus is her contribution to medical science recognized in a most fitting manner.

IRRESPECTIVE of personal opinions regarding the merits of Christian Science, we have long considered the official publication, *Christian Science Monitor*, to be one of the outstanding newspapers of the country. In a recent number of this excellent publication appears an editorial under the title, "Medical Peonage," which openly decries the attempts of some folks to socialize the healing arts. In commenting on the effects of such a program the writer says, "It is difficult to understand why every citizen—including those who by choice would adhere to a rival school, or no school, or who depend on prayer for healing—should be compelled to comply with such a regulation. Incidentally, it is strangely foreign to the legend of the family doctor, who worked under the motto, 'To each according to his need; from each according to his means.'" Further commenting on a Milbank report, urging a more or less compulsory state medicine, the editor says:

"If those who feel they wish material aid in their illnesses were left free to enter or refrain from participation in such a scheme, no criticism could be leveled at it. But, in order to make the plan thoroughly effective, says the fund's secretary, it must be made compulsory upon all. But will that 62 per cent of the people who have not felt the need of medicine sufficiently to seek its aid—although it is offered without cost in countless hospitals and clinics—permit themselves to be saddled with medical peonage?"

Shades of Mrs. Mary Baker Glover Eddy! Since when has it come to pass that Christian Science deigns to come to the aid of medicine?

THE Board of Medical Registration and Examination believes in a system of licensing, whereby a doctor can readily move from one state to the other without delay, when properly qualified. Unfortunately there are forty-eight state police laws which govern licensing, and these frequently operate to the disadvantage of the physician who is changing his location.

Since the organization of the National Board of Medical Examiners, many applicants have appeared before the Indiana Board for recognition of

their certificates but, according to the medical practice act, the Board could not extend such recognition, since the act is mandatory in requiring the examinations. The Attorney General's office has recently pointed out a way by which the Board can recognize the National Board certificate. In brief, the plan is this: Each case is considered individually without regard to a general classification. The Board will formally adopt the examination questions of the National Board, which were given to the applicant, and on receipt of the examination papers properly certified, will make its own grading. The opinion is long and detailed, and inasmuch as the plan is apparently thoroughly practical, it will be given a trial, for a short time at least. This will be a great aid to many men who have not taken any State Board examination, but who have secured the National Board certificate by examination. The laws of many states allow this recognition, and the Board appreciates greatly the constructive suggestions of the Attorney General's office in pointing out a proper legal way in which the National Board certificate may be recognized.

A COMMUNICATION from Dr. Davidson, secretary of the Indiana State Board of Medical Registration and Examination, brings to light an interesting matter, and it also opens a question that has been discussed in THE JOURNAL many times, that of the right of a corporation to practice medicine in Indiana. The inquirer addressed a state official, stating that he had organized the Louisiana General Clinic in New Orleans, and desired to organize similar clinics in several Indiana cities. Accompanying his letter was an advertisement used in New Orleans, and which provides interesting reading. There is a membership fee of five dollars per family, to be paid in advance. This fee covers several items, including a semi-annual physical examination, health certificates, insurance certificates, vaccination certificates, blood tests, and dental examinations. All of these services are free to paid-up members. Then there follows a list of charges for professional services: house calls, one dollar; night calls, three dollars; obstetrical services, twenty dollars, at home or in the hospital (hospital charges to be paid by patient); salvarsans, six dollars; venereal and chronic cases at one-half price; and so on down the list. It should be noted that all of these prices are cash propositions; it is clearly understood that no credit is extended. A page of the circular is devoted to an argument in favor of the plan proposed, in which is quoted a statement from a former president of the Kings County, New York, Medical Society, to the effect that "the greatest health problem of the nation is that of making medical services available to the entire population at a reasonable cost to the patient and the community." We note another interesting thing in the circular: The clinic hours are a bit unusual—8:30 a.m. to 9:30 a.m., 4 p.m. to 5 p.m., and 7 p.m. to 8 p.m. Probably clinic physicians find it more profitable to be in their private offices at the hours commonly devoted to office practice. It is needless to say that the organizer has been advised that Indiana does not provide for such an arrangement.

Tuberculosis Abstracts, a monthly review issued by the National Tuberculosis Association, in its March number, called attention to the fact that medical students and nurses in training face a definite tuberculosis hazard because of frequent exposure to the disease and because, perhaps, of their youth. The Indiana State Nurses' Association has made some investigations concerning this condition in Indiana, and very interesting data have been obtained. For instance, in Indianapolis, 241 special duty nurses have had complete physical examinations since January, 1935, and of these, 16 were referred to the family physician for immediate remedial care (for chest condition), and three were ordered to have complete bed rest. On December 31, 1934, there were in nine hospitals 13 graduate nurse patients and 5 student nurse patients; of these, 3 were from the private duty field, 2 from the public health field, 9 from the institutional field, and 1 was a new graduate. Miss Helen Teal, executive secretary for the State Nurses' Association, has appealed to hospitals to help promote interest in the question of tuberculosis among nurses, and the following recommendations[1] are made:

1. That in general hospitals caring for tuberculosis patients, there must be facilities to isolate these patients completely from the rest of the hospital.
2. That only nurses trained for tuberculosis nursing be allowed to care for these patients. Students should not be assigned to such duty until they have had thorough instruction in this branch.
3. That a more rigid technic be set up, similar to that used for diphtheria and scarlet fever.
4. That in a general hospital all patients admitted with cough and sputum have an x-ray of the chest just as routinely as a blood count or urinalysis.
5. That at admission to training schools and annually thereafter nurses have x-ray and tuberculin tests to determine their exact infection status.
6. That all nurses who react positively to the tuberculin test discontinue caring for tuberculosis patients. While the primary infection is benign, its development leaves the individual suspectible to re-infection or adult type of tuberculosis.

[1] Altshuler, Samuel S.: "Tuberculosis Infection and Disease among Student Nurses."

CONCERNING "DOG HAIR AND DYNAMITE"*

By R. CLYDE WHITE
Director, Bureau of Social Research, Indiana University

"Dog Hair and Dynamite" is a rather unusual subject for an editorial in a medical journal, but the editorial writer of *The Journal of the Indiana State Medical Association* seems to have found plenty to say about it. There is one virtue in this subject—it permits the editor to say almost anything or nothing, and he has done both in various paragraphs. When one has finished reading this editorial, his knowledge of the medical profession is not greatly enlarged, but he is sure that there are a lot of things in the world which the medical profession does not like. That is something.

In this editorial the writer "pans" the social workers in general and the present writer in particular for something which seems to be akin to grandiose delusions. Well, some social workers have such symptoms; that much should be admitted. But doctors are not entirely free from them. So perhaps the books would balance. During the last few years social workers happen to have got a good deal of front page space. The unemployment situation was so serious that somebody besides doctors and business men was needed to prevent starvation and revolution. So President Roosevelt called in one of the *betes noir* of the medical profession, a social worker, namely, Harry L. Hopkins, and Mr. Hopkins has been engaged in spending some billions of dollars to save life and health. He is generally credited with doing a good job. Naturally the social workers have a slight swelling about the chest, because one of their number has acquitted himself so well.

The particular horror of the editor of THE JOURNAL is the plan for organizing the public welfare system in Indiana which the Indiana State Committee on Governmental Economy recommended. He finds it autocratic, arrogant, bureaucratic and generally detestable, and he has dark suspicions that the present writer hoodwinked the committee into making this recommendation. Let his fears be at rest; no member of the committee could be hoodwinked on anything, and they were unanimously hardboiled about matters pertaining to public welfare work. The recommendations of the general committee are given on pages 9 to 40. The remainder of the report, 703 pages, consists of the reports of the sub-committees. The problems to be studied were outlined, and a sub-committee was given responsibility for each one. Each sub-committee made its report to the general committee. Some of the recommendations were accepted, and some were passed by, but the report of the sub-committee was published as it wished it to be published. The present writer did not have a vote in the committee; he was executive secretary. That should make clear the degree of responsibility which the writer has for different parts of the report.

But the present writer does agree that there should be a strong department of public welfare with some supervisory authority reaching down into the counties, and he further agrees that county departments of public welfare should be created. He wishes to be very emphatic in insisting upon the importance of good standards of personnel. The editor does not want any state standards of personnel. If the state department should have power to determine personnel standards and should set up an eligible list, that would be autocratic! Has the editor ever heard of the licensing of school teachers by the State Department of Education? Has he ever heard that judges must select probation officers from a list of eligibles submitted by the State Probation Commission? Well, it is something of this sort which should be done in public social work. Furthermore, coordination of public welfare institutions, state social agencies, and local social agencies is the simplest principle of sound administration. There is nothing autocratic about it. The public welfare agencies are attacking the social problems of the state; they are the enemy. At present there are several hundred pieces of the public welfare system which operate independently. What would the editor think of an army setting out to attack an enemy, if the infantry, the artillery, the tank corps, the medical corps, the air corps, and the ordnance corps each made its own plans and started to the attack? That is about as sensible as having several hundred uncoordinated branches of public welfare work setting out to attack the social problems of the state.

The editor ridicules what he terms the "so-called trained social workers." It might be admitted at this point that perhaps 90 per cent of the persons holding social work positions in Indiana are untrained; they are not even "so-called trained social workers." What is a trained social worker? The American Association of Social Workers is the national organization of professional social workers and includes by far the majority of all who can in any sense be called "trained social workers." At the present time there are about 1,275 social work positions in public and private agencies in Indiana, but only 97 persons in Indiana are members of the American Association, and the majority of these live in Marion County. Some

(Continued on page 312)

* This is Mr. White's reply to the editorial published under this title in the May issue of THE JOURNAL.

MEETING TODAY'S CHALLENGE

BY L. B. McCRACKEN, MANAGER, MEDICAL AND DENTAL BUSINESS BUREAU OF INDIANAPOLIS

(This is an introductory article concerning a plan which is attracting nation-wide attention. Future articles will deal with the details of the plan.)

One of the primary considerations of the physicians constituting the American Medical Association is the provision of adequate medical service to all the people.

The House of Delegates of the American Medical Association, during its special session in February of this year, reaffirmed its encouragement to local medical organizations to establish plans for the provision of adequate medical service for all, adjusted to present economic conditions.

The Bureau of Medical Economics of the American Medical Association is studying numerous plans for medical service which now are undergoing trials in various communities in the United States. There can be no model plan which assures a "cure-all" for social ills, but any plan adopted must serve the people of the community in the prevention of disease, and the maintenance of health with curative care in illness. It must at the same time meet apparent economic factors and protect the public welfare by safeguarding to the medical profession the functions of control of medical standards and the continued advancement of medical educational requirements. It must not destroy that initiative which is vital to the highest type of medical service.

Unless local medical societies do take a forward step in meeting today's challenge of adequate medical service for all through constructive and progressive moves, they will be faced with theoretical and unscientific proposals of health insurance, socialized medicine and other vicious forms of demoralizing bureaucracy.

After eighteen months of study the Physicians' Equity Association of America, Inc., comprising 1,400 New York physicians, has taken certain economic problems in hand and formulated plans by which it proposes to deal with them. One of the foremost planks in the platform is "the creation, on both sides, of a clearer economic situation between patient and doctor."

Eminent doctors the country over are devoting serious thought to the means of gauging their charges to the patient's ability to pay. This still permits them to be generous in worthy charity service, but to know how to gauge the patient's ability is the problem. What method or means does a conscientious doctor have at his disposal for determining the true economic conditions surrounding a patient's ability to pay in this age of rapid changes?

The Indianapolis Medical Society in May, 1934, adopted the "Medical Service Plan." This plan, in cooperation with the Indianapolis Dental Society and Indianapolis hospitals, permits the average wage earner to secure the best of medical care commensurate with his income and ability to pay. The business details are handled through the physicians' own organization—the Medical and Dental Business Bureau.

Commendatory articles have appeared in the news and editorial columns of the Indianapolis daily papers, and other favorable publicity has been given, some of which has been national in scope. Quoting from the editorial page of the Indianapolis *Star* of May 24, 1934, we find "the program of the Indianapolis organizations (Medical and Dental Societies) also may prove a timely step in curbing an undesirable trend toward socialized medicine."

Local industry has offered its full cooperation to the Business Bureau and the public in general has expressed its need and gratitude for the privileges of the plan. Physicians have found that it fills a long-felt need.

THE PLAN

Briefly, the bureau acts as the credit and accounting department of the doctor's office. A worthy patient who cannot pay cash may be referred to the bureau offices either by his physican or his employer. The bureau has the facilities for making a credit and character investigation which includes the ability of the patient to pay a certain amount over a certain period of time. The doctor is the sole judge as to whether or not he desires to handle the case and, if so, the bureau completes the arrangements and handles the payments, settling with the doctor and hospital monthly.

By a pre-arrangement of this kind it relieves the doctor of many time-taking details and prevents disputes, misunderstandings, and future losses. It gives the doctor scientific facts upon which to base his charges. As to the patient, it gives him free selection of doctor; prevents his falling into the hands of unqualified or irregular practitioners; permits him to obtain services now which may have been postponed due to lack of ready cash, and relieves him of the worry and uncertainty of financial arrangements at a time when he should not be forced to worry about them.

This plan brings to the doctor and to the private hospital many cases which would otherwise go to tax and charity supported institutions.

Requests from all over the United States are coming into the bureau offices for information as to the operation, feasibility, and details of this plan. Within the past month, requests for complete information have been received from several medical and dental organizations and publications.

THE PRESIDENT'S PAGE

At the recent convention of the Indiana Academy of Ophthalmology and Oto-Laryngology, which was held at Indianapolis, there was gathered a large number of the membership. The session was graced with an exceedingly fine program and the doctors in attendance, by their enthusiasm, gave concrete evidence that their lowered incomes and imminent threats of governmental regimentation with price-listed services and other phases of economic confusion, which threaten to bludgeon their unbowed heads, show no signs of daunted courage or mitigated fortitude. But, on the other hand, the doctors seemed to redouble their efforts toward the advancement and perfection of a genuine medical science. This attitude is conclusive evidence that the scientific physician is so allured and fascinated by the study of his branch of science that financial and material objects serve only as a necessary means to a successful medical career and successfully refutes the propagandized statement that doctors are mercenary and greedy. If there is one among us whose conduct belies this conclusion, may he blush for shame and receive his own condemnation, while we beseech the general public not to mistake an exception for the rule.

Having just received a program of the first district graduate educational convention, to be held in Evansville on May 8, and having scanned the program, I am at once convinced that interest and enthusiasm for advancement of scientific medicine in Indiana has not suffered depression or been wet-blanketed by social unrest, all of which is most gratifying. It is in harmony with human instincts to strengthen fortifications and exercise more potential resistance wherever and whenever there is an approach of sinister or deleterious influences or threatening handicaps. By this means the fittest have survived the ages and will continue to do so. By this law when the patient upon the reception of toxins within his body, at once begins to marshal immunizing forces and substances in some sort of super-intelligent way, maybe we might say tissue-intelligent way, the sole purpose has been to preserve vital phenomena, looking to the perpetuation of the specie. However, there may be a great temporary loss of vitality. But, when the etiological agencies have been destroyed, according to biologic and physiologic laws, normal processes of repair quickly supervene and another victory is won. So, in the treatment of disease we are but the hand-maidens of what we choose to call natural laws, physiological, biological and chemical, and our success will be commensurate with our knowledge of these laws.

In dealing with the ever-present problem of social conflict, we cannot and must not ignore those fundamental psychologic laws, which govern the conduct of man, of which we seem to know very little. Indeed, they, as a whole, remind us much of a jig-saw puzzle. Man being a social creature, either individually or collectively, as the case may be, when his character, his welfare or personal pride has been assailed, he instinctively responds with all his courage and fortitude in defensive combat, and if he has justice and truth on his side, is apt to win in the argument, thereby revealing within himself certain qualities, which even he did not know that he possessed.

Now, through some strange miscarriage of social psychology, the American medical profession has been assailed and stigmatized as mercenary and undependable. Our assailants and engineers of stigmata and directors of propaganda are possessed of jazz voices of great volume, from high soprano to low bass, giving a continual performance. Incidentally, many of the artists are drawing large salaries at a time when good jobs are scarce. Much money has been used to subsidize the press and radio, while many listeners are like innocent lambs, quite willing to follow the bell wether.

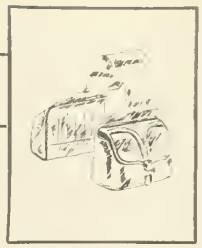
But what about the victims of this wholesale assault? Medical men are, by training and education, quite modest, cultured and dignified, soft-spoken and kind, and have already turned the other cheek without even taking the time to explain to their patients and friends, who are the electorate, who could and would express a protest to their electors, which make up legislative bodies, both state and national. Dignity and culture have been and are yet a great asset of our profession, but we have never utilized the press or radio for self-laudatory purposes, and God forbid that we do. But, in the public mind, this unfair disparity leaves us with the short end of the handspike and diminutive leverage. Hence, the burden of defense rolls to our side and hence the question—will forbearance cease to be a virtue? Or, will we have to resort to open combat, which is the necessary inherent instinct by which the survival of the fittest have always survived and conversely the unfit have perished?

It would seem that in our struggle we must set right and maintain a just attitude within the mind of the general public, synchronizing with these efforts the most strenuous and sincere study and practice of medicine. Truly, by your works you shall be known. Justice when wantonly assailed may be dashed about, but will finally ride the waves of troubled waters and land upon the hill-top as a Palladium of security. May we continue to be masters of our fate and captains of our souls.

W. F. Leach



INDIANA MEDICINE IN RETROSPECT



L. G. ZERFAS, M. D.
Historian, Indiana State Medical Association

THE INFLUENCE OF TRANSYLVANIA UNIVERSITY

SAMUEL McKEE, JR., Vincennes, Indiana

Dr. Samuel McKee, Jr., was born in Virginia,[1] the exact time being unknown. He received a classical education at Transylvania University. He was a proficient scholar both in Greek and Latin. While a student at Transylvania he served in the capacity of librarian for some time, and was said to have read every book in the library. Patton[2] stated that an examination of the books in Dr. McKee's medical library showed him to be a student of the accepted medical teachers and writers of the day. It is not known for certain whether he attended medical lectures at Transylvania, but it seems highly probable that he did. No records of students attending medical lectures in that institution before 1819 are available. He was doubtless one among the very first to attend the medical lectures delivered by Dr. Samuel Brown and Dr. Frederick Ridgely during the years 1799-1801. It should be recalled that the medical department was organized at Transylvania in 1799. In March, 1802, he was assigned to medical duty as surgeon's mate at Fort Knox (Vincennes).[3] His commission was signed by Thomas Jefferson, President of the United States, and dated April 27, 1802.[4] He was the second physician to settle in Vincennes; the first is said to have been Dr. Elijah Tisdale, army surgeon, assigned to duty at Fort Knox in 1792.

Archibald B. McKee, son of Dr. Samuel McKee, Jr., stated[5] that his father was the first regular American physician to settle in Vincennes. This makes it seem highly probable that Dr. McKee did attend a regular course of medical lectures at Transylvania, and that Dr. Tisdale was probably educated in Europe.

Dr. Samuel McKee, Jr., married Nancy Shannon of Knox County, Indiana, in 1804 or 1805. She died at the residence of Colonel Francis Vigo, November 25, 1818.[6]

Little is known of the practice of Dr. Samuel McKee. Kemper, in his Medical History of Indiana,[7] lists a fee bill (1805), which is here reproduced, and from it some idea of the therapy employed may be observed:

Visit in Town	$1.50; medicines additional
extracting teeth	.25
cathartic pills, 30	.50
one dose of calomel, 1 oz. paregoric and vial	.62½
one dose calomel and one dose tartar emetic	.50
20 mercurial pills	1.50
accouchement cases, natural	$5.00

From this bill it is apparent that aside from the mechanical procedures most of the therapy related to the gastro-intestinal tract, either purgation, emesis, or means of checking a diarrhoea.

Dr. McKee died November 5, 1809.[8] A notice appeared June 30, 1810, in the *Western Sun*[9] stating "all persons indebted to the estate of Dr. Samuel McKee, deceased, are requested to come forward and settle up their respective balances."

ANDREW P. HAY, Charlestown, Indiana

Dr. Andrew P. Hay, son of John and Nancy McCampbell Hay, was born December 1, 1790, at Harrodsburg, Kentucky. His parents had moved to Harrodsburg a few months before his birth from Rockbridge County, Virginia. In 1809 the family moved to Clark County, Indiana Territory, to join many of their relatives and friends. John Hay, two years previously, had surveyed the site of Charlestown. Here on a hill he built a log house and settled his family, except for his eldest son, Andrew, who remained in attendance at Transylvania University (1809-1810).

In the latter part of 1810 John Hay died after a short illness and his son Andrew came from Kentucky, where he was studying medicine, to begin practice in Charlestown and to become the head of his father's family. His practice must

[1] Letter of Major General James F. McKinley, Adjutant General, April 26, 1935: "The records of the office of the Adjutant General show the following: Dr. Samuel McKee, Jr., was born in Virginia. . . ." History of Knox and Daviess Counties, Indiana, Goodspeed Publishing Company, Chicago, 1886, p. 370: "The father (Dr. Samuel McKee, Jr.) was born in Lexington, Ky. . . . He died November 6. 1809."

[2] Alfred Patton, M. D., The Medical History of Vincennes, Indiana. Transactions of the Indiana State Medical Society, 1874, p. 37.

[3] Letter of William A. Slade, Chief Reference Librarian, Library of Congress, April 25, 1935. Francis B. Heitman, Historical Register and Dictionary of the U. S. Army, 1789-1903, Vol. I. Government Printing Office, Washington, D. C., 1903, p. 671. Col. Wm. H. Powell, List of Officers of the Army of the U. S. from 1779-1900. L. R. Hamersly & Co., N. Y., 1900. pp. 41, 49 and 50.

[4] Alfred Patton, Medical History of Vincennes, p. 37.

[5] History of Knox and Daviess Counties, Indiana. Goodspeed Publishing Company, Chicago, 1886, p. 370.

[6] Ibid., 370. Western Sun, Vincennes, Indiana, November 28, 1818, p. 3, column 4.

[7] G. W. H. Kemper, A Medical History of Indiana. American Medical Association Press, Chicago, 1911, p. 12.

[8] History of Knox and Daviess Counties, Indiana, 370. Powell, List of Officers of the Army of the U. S., 50.

[9] Western Sun, Vincennes, Indiana, June 30, 1810, p. 3, column 4.

have grown rather rapidly in this new settlement among friends and relatives. His sister, Ann Gilmore Hay, married Jonathan Jennings, August 8, 1811, who had served as territorial delegate in Congress continuously from 1809 to 1816. When Indiana became a state in 1816 Jennings became the first Governor of the State of Indiana, which office he held from 1816 to 1822. These associations must have been of great assistance during the early years of Dr. Hay's practice.

In 1815 he married Sarah Stites Gano of Kentucky, the daughter of Dr. Isaac Eaton Gano. The bride came to live in Charlestown in a brick house located on the courthouse square and built only a short time before by Dr. Hay.



Andrew P. Hay

General Harrison appointed Dr. Hay as surgeon to the army which fought in the battle of Tippecanoe. He served two terms (1819-1820) in the Indiana legislature which met at Corydon, the seat of the state government. The General Assembly and court sessions filled the inns and boarding houses and brought liveliness to that town. These, too, were great advantages for Dr. Hay. He was appointed receiver at the Jeffersonville land office in 1824 and was reappointed in 1828.

His practice was very large, extending over five counties. Only two of his students are known, James Sanderson Athon of Charlestown (1834) and Willis W. Goodwin of the same place (1836).

He had a son, Andrew J. Hay, who was a physician, and about 1844 formed a partnership with him. Dr. Andrew P. Hay died April 14, 1849.

A Biographical History of Eminent and Self-Made Men of the State of Indiana. Western Biographical Publishing Company, Cincinnati, 1880. District 3, p. 23.

American State Papers, Documents of the Congress of the U. S. in Relation to the Public Lands, Vol. VII, p. 560.

Indiana Historical Collections, XII, Messages and Papers of Jennings, Boon and Hendricks. Wm. B. Burford, Indianapolis, 1924.

Indiana Historical Society Publications, Vol. 10. Bobbs-Merrill Co., Indianapolis, 1933.

Mabel C. Morrison, Ann Gilmore Hay. John E. Hampton, Indianapolis, 1925.

Western Sun, Vincennes, Indiana, April 1, 1826.

Captain Lewis C. Baird, Clark County, Indiana. B. F. Bowen & Co., 1909, Indianapolis.

THOMAS W. FRY, Crawfordsville and Lafayette, Indiana

Dr. Thomas W. Fry was born August 4, 1814, on the farm of his father, T. W. Fry, Sr., near Danville, Kentucky. He graduated at Center College in 1835 and later studied medicine under Professor William H. Richardson, M. D., professor of obstetrics in Transylvania University. He graduated from Transylvania in 1837[1] and settled in the same year in the town of Crawfordsville, Indiana, where he entered into practice with Dr. Curry. In November, 1837, he married Maria W. Rochester of Russellville, Kentucky. Two years later found him attending a third course of lectures in Louisville, where he spent the greater part of his time in the laboratory under the instruction of Professor Lunsford P. Yandell.

Some years later he attended lectures and visited the hospitals in Philadelphia, remaining there during the winter. He was for a time chief editor of the Montgomery Journal, a paper devoted to the interest and advancement of the Whig Party. During the period from 1848 to the beginning of the Civil War he took an active interest in politics. During this period he also carried on a large practice in both medicine and surgery, being particularly proficient in the latter.

In April, 1861, Dr. Fry enlisted as surgeon of the Eleventh Indiana Volunteers, commonly known as the Indiana Zouaves, under Col. Lew Wallace.[2] For two years he served on the field, but was transferred to the U. S. Hospitals at Louisville and New Albany, where he continued as chief surgeon to the close of the war. He returned to Crawfordsville broken in health, but resumed practice until he was appointed collector of internal revenue for the Eighth Congressional District in 1867. He served in this capacity throughout the remainder of President Johnson's term, after which he removed to Lafayette, Indiana, where he practiced medicine until a short time before his death on February 24, 1873.

Dr. Fry took an active interest in the various medical organizations. He attended the medical convention at Indianapolis, held June 6, 1849, for the purpose of organizing the State Medical Society.[3] In 1858 he was elected vice-president of the state society, serving during the year 1859.[4]

Dr. S. G. Irwin in his biography of Dr. Fry pays this tribute: "He possessed a cultivated mind, was ripe in his profession, popular in his practice, and respected by all who knew him."[5]

[1] S. G. Irwin, M. D., Biographical Sketch of Thomas W. Fry, M. D. Transactions of the Indiana State Medical Society, 1874, p. 183.

[2] Lew Wallace, An Autobiography. Harper & Bros., New York, 1906, p. 347.

[3] G. W. H. Kemper, A Medical History of Indiana. American Medical Association Press, Chicago, 1911, p. 182.

[4] Ibid., p. 179.

[5] S. G. Irwin, Transactions of the Indiana State Medical Society, 1874, p. 184.

DIPHTHERIA REPORT FOR APRIL, 1935

There were three deaths in the month of April, 1935, from diphtheria. It is very interesting to observe that all of these people were over forty years of age, the ages being forty-six, forty-nine, and fifty-seven. This is a rather striking demonstration of the fact that we have succeeded in protecting the children, but not the adults. Of course, no particular effort has been made to urge immunization of persons above school age.

The counties reporting diphtheria deaths for this month were Elkhart, Marion, and Vigo. Elkhart and Vigo enter the list for the first time this year; Marion County has had a total of ten deaths so far in 1935.

The number of deaths from diphtheria for the year is thirty-three, which is three under the lowest previous figure (thirty-six in 1934). According to statistics for the past several years, we may expect about one-third of the deaths to occur during the first third of the year. The second one-third of the year shows very few deaths, and the last one-third of the year about 60 per cent.

It is time, during the next four months, to be immunizing the children and getting them ready for the beginning of school next fall, when there is almost sure to be a great increase in the number of diphtheria deaths.

Below will be found a list of the deaths by counties for the month of April and for the year to date.

County	No. Deaths April, 1935	Total for 1935
Allen	0	3
Boone	0	1
Bartholomew	0	1
Crawford	0	1
Delaware	0	1
Elkhart	1	1
Fayette	0	1
Grant	0	1
Jackson	0	1
Knox	0	1
Lawrence	0	2
Lake	0	1
LaPorte	0	1
Madison	0	1
Marion	1	10
Spencer	0	1
Steuben	0	1
Tippecanoe	0	1
Vigo	1	1
Warrick	0	1
Wayne	0	1
Total	3	33

THURMAN B. RICE, M. D., Chairman,
Diphtheria Prevention Committee.

SECRETARIES' COLUMN

The A. M. A. meets in Atlantic City, June 10, 1935. This is a joint meeting with the Canadian Medical Association. Out of this meeting should come a lot of information that will be valuable to the medical profession. If you cannot attend, be sure to watch for the report of the House of Delegates.

Did you, as secretary of your county society, read the pamphlets sent you by our headquarters office last month? It is important that you do so, and it is equally important that you ask the members of your society to read them thoroughly.

How many doctors in your county that are eligible for membership in your society do not belong? With all the unrest that is going on today, it is necessary that the medical profession should be organized 100 per cent. Heretofore, doctors were doctors, but today a doctor must be at least in part a politician. He must be politician enough to inform his patients and friends that social security can be had without law and lawmakers, and that the county medical society can supply medical security for all in their domain.

Do not forget that a vacation is a wonderful investment.

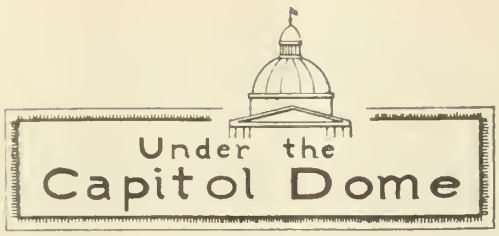
I understand that some of the tuberculosis sanatoriums in the state are still in competition with the doctors. I thought this practice was stopped about one year ago. It is up to you, Mr. Secretary, to investigate and forward your information to the headquarters office. If anything is to be done about this, you must have facts to present. Institutions are not supposed to practice medicine, if I understand the ruling of the Attorney General.

Did you read the editorial, "Dog Hair and Dynamite," in the May issue of THE JOURNAL? That was a four-star production.

Remember, the Indiana State Medical Association meets in Gary, October 8, 9, and 10.

How many doctors took advantage of the postgraduate courses that were given in Indiana during the month of May? If you were not one, you missed a lot of good work.

Chairman.



The semi-annual meeting of the State Board of Medical Registration and Examination will be held in the board's offices in the State House on July 9. No announcement was made of matters to be taken up by the board at the meeting.

* * *

The State Board of Medical Registration and Examination conducted a clinical examination of Illinois physicians seeking Indiana licenses at the Indiana University hospitals April 24. The examinations were conducted under the reciprocal agreement between the two states.

Those to whom Indiana licenses were granted after successfully passing the clinical examinations, and the places where they will practice, are: Ralph E. LeMaster, Marion; Sidney Price, Marion; Catherine E. Logan, Monticello; Hawthorne C. Wallace, Crawfordsville; Marvin H. Sandorf, Veterans' Hospital, Indianapolis, and William H. Clark, South Bend.

* * *

The regular annual examination of applicants for licenses to practice medicine in Indiana will be conducted by the State Board of Medical Registration and Examination on June 25, 26, and 27, it has been announced.

The examinations will be conducted in the assembly room of the Claypool Hotel in Indianapolis where they have been held for the past few years.

At the same time the state podiatry board, which is under the supervision of the medical board, will conduct its annual examination. The podiatry examination will be on June 25 and 26, and will be in the Palm Room of the Claypool Hotel.

POISONOUS DRUGS

Possibility that the State Board of Pharmacy will adopt a regulation designating specifically certain chemicals and drugs as being poisonous was seen in the fact that John A. J. Funk, secretary of the board, has obtained an opinion from Attorney General Philip Lutz, Jr., on the subject.

The attorney general's opinion held that the pharmacy board does have the authority to adopt such a regulation.

"The term poison is not defined by any act of the general assembly," the opinion said. "In order to secure a proper and uniform administration of the health laws of the state it would be highly advantageous to have the State Board of Pharmacy adopt, under its authority to make rules and regulations, a working definition of the term which would be consistent with the usual, accepted meaning of the term and yet definite enough so that the health laws might be understood and obeyed by all," it said.

"Should the State Board of Pharmacy decide to adopt a definition of poisonous drugs such definition should, (first) be consistent with the health laws of the State of Indiana; and (second) be consistent with the usual and accepted meaning of the term as defined by authoritative dictionaries. It is my opinion that the state board has the authority to adopt such a definition, and in such definition to designate certain chemicals or drugs as being poisonous."

PROPOSED STATE WELFARE BOARD

A proposal for setting up a state welfare board which would have charge of all state charitable and penal institutions, as well as supervisory powers over county poor relief and charitable activities, is under consideration by the special legislative committee appointed at the close of the 1935 session of the general assembly to consider bills for presentation to a special session or the next regular session.

Proponents of the plan claim that it would eliminate duplication of activities, reduce the number of employes necessary to carry on welfare work in the state, and decrease administrative and operative costs.

County welfare activities would be in charge of a board of five members to be appointed by the circuit court judges and the county boards would work in cooperation with the state board.

VISITING HOUSEKEEPERS

A new type of social and health welfare work has been started by the women's work division of the Governor's Commission on Unemployment Relief.

Visiting housekeepers, working under the direction of Mrs. Letitia Hall Carter, state director of women's work, are working in poorly equipped, motherless and fatherless homes in thirty counties of the state. These visiting housekeepers are women on relief and either are experienced maids or unemployed home economics teachers. They go into homes which have been reported as definitely needing attention, according to Mrs. Carter. In cases where an older child is trying to take care of other children, the housekeeper goes to the house early in the morning and cleans the house, does the washing, ironing, and mending, and prepares the meals.

The service was started in Lake County, and one of the first projects there was to teach women members of families on relief how to make bread. In Vanderburgh County the service has been confined to homes where there are newly born babies.

More than 1,000 families now are being benefited by the health and general service provided by these visiting housekeepers, according to officials of the unemployment relief commission.

VOICE OF THE DOCTOR

THE HURTY PLAN AND THE INDIANA PLAN

For the past year the so-called "Indiana Plan" has been receiving considerable publicity from certain interested groups, who call attention to a two-year old infant organization which they claim is already a prodigy, brilliant, spectacular, super-efficient, shattering all previous records of public health work in Indiana.

This unwarranted propaganda, premature and ill-timed, suggests the old saying: "The dead are soon forgotten."

The few worthy features of the so-called "Indiana Plan" are inherited from the Hurty Plan, evolved by the late and illustrious Dr. John N. Hurty, Indiana State Health Commissioner, a national and international figure in public health work for more than a quarter of a century.

Dr. Hurty was always opposed to partisan politics in public health work, and the selection of tyros for responsible positions, features prominent in the so-called Indiana Plan.

The Hurty Plan grew from a keen intellect, a broad humanity, scientific training, intensive study, arduous effort, speaking ability, and a wide knowledge of human nature. Dr. Hurty wrote most of Indiana's health laws.

Year after year Dr. Hurty campaigned over the state with a health message, and in the interest of health law enforcement. His state health organization under the Hurty Plan was dignified, non-partisan, comprehensive, economical, and preeminently cooperative with the medical profession of the state.

For over thirty years the writer, as county and state health official, was in close contact with the efficient Hurty Plan, and each year attended the sessions of the health officers' association. Patiently, persistently, and with clear and comprehensive vision, Dr. Hurty labored to spread the gospel of health, and to overcome much prejudice against health measures existing in the state. Not a few doctors were unwilling to accept his theories and advice, and it was not always easy to secure their cooperation in the enforcement of health laws and rules. Dr. Hurty's good works have followed him. The Hurty Plan was ably and effectively continued by his successor, Dr. William F. King, until the guillotine of party politics dismembered an efficient organization.

For these and many other reasons, when we read of the so-called Indiana Plan we are reminded of Fletcher's ancient classic couplet:

"Why dost thou laugh?
What mare's nest hast thou found?"

Because, for the so-called Indiana Plan, much more time and experience will be necessary to prove that it is not another political mare's nest.

HUGH A. COWING, M. D., Muncie.

DEATH NOTICES

CHARLES H. EDWARDS, M. D., of Terre Haute, died May sixth, aged seventy-six years. Dr. Edwards was a member of the Vigo County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the Cincinnati College of Medicine and Surgery in 1885.

DAVID J. MARSHALL, M. D., of Columbus, died May tenth, aged seventy years. Dr. Marshall had practiced medicine in Columbus for thirty-seven years. He was a member of the Bartholomew County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the University of Louisville School of Medicine in 1891.

ELMER E. GLOVER, M. D., retired physician, died at the Masonic Home in Franklin, May tenth, aged eighty-one years. Dr. Glover was a graduate of the Indiana Medical College, Indianapolis, in 1878.

CHARLES A. SELLERS, M. D., of Hartford City, died April twenty-seventh, aged sixty years. Dr. Sellers was a prominent member of the American Legion, and had served with the American Expeditionary Forces in France during the World War as a lieutenant of Base Hospital Unit 113. He was a member of the Delaware-Blackford County Medical Society, the Muncie Academy of Medicine, the Indiana State Medical Association, and the American Medical Association. Dr. Sellers graduated from the Fort Wayne College of Medicine in 1904.

THOMAS E. STUCKY, M. D., of Milroy, died April thirtieth, aged eighty-two years. Dr. Stucky practiced medicine from 1891 to 1914, and served as collector of customs in Indianapolis from 1914 to 1918. He was a graduate of the University of Louisville School of Medicine in 1874.

ALTA K. BORAM, M. D., of South Bend, died April twelfth, after a long illness. Dr. Boram graduated from the Eclectic Medical College of Cincinnati in 1905. She was the wife of Harry B. Boram, M. D.

JOSEPH A. MCGEE, M. D., of Indianapolis, died April fifteenth in a Lebanon hospital where he had been a patient for several months. Dr. McGee was a graduate of the Physio-Medical College of Indianapolis in 1883. He was seventy-eight years of age.

HOOSIER NOTES

DR. GRAHAM PUGH has opened an office in Connersville for the practice of medicine.

DR. J. M. KERCHEVAL of Wolcottville has moved from the Rarick Building to the Eshelman Building.

DR. P. W. FRASH will occupy the offices of Dr. Robert Acker in South Bend while Dr. Acker is in Europe.

DR. CHARLES P. EMERSON of Indianapolis made the principal address at Elkhart's National Hospital Day observances, May twelfth.

DR. AND MRS. E. E. SCHRIEFER of Seymour have moved to Cannelton. Dr. Schriefer had practiced in Cannelton before going to Seymour.

DR. ANNA GOSS of Madison has moved her office to 104 East Third Street in Madison, in quarters formerly occupied by Dr. P. N. Kestner.

DR. R. A. NASON of Chicago has moved to Garret where he will be associated with Dr. J. A. Clevenger in the practice of medicine.

DR. J. B. CUSHMAN has opened an office in Colfax in association with F. A. Jones, dentist. Dr. Cushman has been practicing at Darlington.

DR. W. H. CLARK of Detroit has become associated with Dr. E. J. Lent of South Bend in the practice of ophthalmology and otolaryngology.

DR. FRED C. GLENN, who has been practicing in Tell City for several years, has opened offices in Evansville, where he will specialize in anesthesia.

DR. RUSSELL LAVENGOOD of Marion will move his office to recently purchased property at Ninth and Washington Streets, after he returns from Europe next fall.

THE class of 1915 of the Indiana University School of Medicine will hold its twentieth annual reunion at Bloomington, on Commencement Day, June seventeenth. Members and their families are invited.

ANNOUNCEMENT has been made of the engagement of Miss Evelyn Kuhn of Wyatt, Indiana, and Dr. Charles Proudfit of Osceola. They will be married June fourteenth in Wyatt.

PLANS have been made for the construction of a modern hospital to be built on the site of the Woodlawn Hospital in Rochester. The cost will be approximately $50,000.

DR. GEORGE CRESS, interne at the Linville Memorial Hospital in Columbia City, has gone to Columbus, Ohio, where he is a first lieutenant in the United States Army.

DR. W. H. HAWLEY of College Corner, Ohio, a member of the Indiana State Medical Association, retired from the practice of medicine on May first, after fifty years of service.

DR. C. C. RAYL of Decatur has employed architects to prepare plans for the construction of a clinic and physicians' office building, to be erected on South Second Street in Decatur.

THE office equipment and practice of the late Dr. Charles A. Sellers of Hartford City has been sold to Dr. Bryce P. Weldy of Fort Wayne, who expects to open the office June first.

DR. ROBERT M. MOORE of Indianapolis addressed the members of the McLean County Medical Society at Bloomington, Illinois, April ninth. His subject was "Prognosis of Heart Disease."

MORE than forty ear, nose and throat specialists from several states attended the course in otolaryngology sponsored by the Indiana University school of medicine, under the direction of Dr. John F. Barnhill.

DR. GRACE CAUFMAN, who has been anesthetist at the Deaconess Hospital in Evansville, has gone to Chicago where she will serve a year's internship, specializing in anesthesia, at the Billings Hospital.

MRS. EMMA L. OLIVER, widow of Dr. John H. Oliver, prominent Indianapolis surgeon, died in Indianapolis, May eighteenth. Dr. Oliver, at the time of his death in 1927, was professor of surgery of I. U. Medical School.

AT THE May ninth meeting of the Tippecanoe County Medical Society, the time of the meeting was changed to the second Tuesday of each month, with the exception of July and August, when no meetings are held.

MISS MARJORIE DUNCAN of Indianapolis and Dr. David G. Pugh of Rushville were married, April twenty-eighth, at the home of Dr. and Mrs. E. O. Asher in New Augusta. Dr. and Mrs. Pugh will reside in Connersville.

DR. MORRIS FISHBEIN, editor of *The Journal* of the American Medical Association, was one of the principal speakers at the seventy-eighth annual convention of the Indiana State Dental Association, held in Indianapolis May 20 to 22.

DR. J. H. STYGALL of Indianapolis was elected president of the Trudeau Society which met with the Indiana Tuberculosis Association in April. Dr. R. B. Sanderson, of South Bend, was named vice-president, and Murray A. Auerbach, Indianapolis, secretary.

OFFICERS for the Sixth District were elected at Rushville when the district meeting was held on May ninth. They are: President, Joseph L. Allen, Greenfield; secretary, Frank H. Green, Jr., Rushville. The next meeting of this district society will be held at Shelbyville, May 14, 1936.

DR. JOHN T. SHORT has been elected president of the Fort Wayne Academy of Medicine and Surgery, and Dr. J. L. Wyatt has been made vice-president. Dr. C. B. Parker was re-elected secretary-treasurer. The organization will hold no more meetings until next fall.

TENTH District Medical Society elected the following officers at the meeting held in East Chicago, May ninth: President, James C. Brown, Valparaiso; vice-president, H. O. Seipel, Valparaiso; secretary, G. R. Douglas, Valparaiso; councilor, N. K. Forster, Hammond.

THE eighth annual graduate fortnight of the New York Academy of Medicine will be held October twenty-first to November second, and will be devoted to a consideration of "Diseases of the Respiratory Tract." Complete program may be obtained by addressing Dr. F. P. Reynolds, New York Academy of Medicine, 2 East 103rd Street, New York City.

CHARLES W. COOPER, who posed as a representative of the A. M. A. and collected Fellowship dues and subscriptions to THE JOURNAL OF THE A.M.A., is now serving a prison term for fraud. Physicians should remember that bona fide representatives always will produce proper credentials.

PROSECUTIONS for violation of the Federal Food and Drugs Act, terminated during March, brought fines aggregating $2,644, including a fine of $1,000 assessed against T. M. Sayman, self-styled herb doctor, who made a fortune commercializing a common plant of the American southwest, called the "soaproot" or "Spanish bayonet." "Doctor" Sayman paid the entire fine in one- and two-dollar bills.

RECENTLY President Roosevelt approved the selection of eighty-nine lieutenant commanders in the Navy Medical Corps for promotion to commander as vacancies occur. The list included the following Hoosiers: Morton D. Willcutts, Indianapolis, Naval Hospital, Washington; Otis Wildman, Butlerville, Philadelphia Naval Hospital; and George D. Thompson, Sharpsville, Naval Air Station, San Diego.

AN ANNEX will be constructed at Ball Memorial Hospital, Muncie, to cost approximately $250,000, as a gift to Delaware County from the Ball brothers of Muncie. The annex will be used principally for isolation patients. The building will consist of three floors. A major portion of the third floor will be a glass-inclosed solarium for tuberculosis patients. The annex will be adequate for the care of fifty patients.

A GROUP of fifty physicians from South Bend attended the April sixteenth meeting of the Fort Wayne Medical Society when Dr. C. C. Sturgis of Ann Arbor, Michigan, was the guest speaker. Tentative plans were made for another joint meeting of these two societies, inasmuch as this one was highly successful. A similar plan has been found thoroughly enjoyable by the physicians of Carroll and Clinton counties. It probably would be successful in your district. Why not try it?

ON MAY first, the State of Kansas was officially recognized by the U. S. Department of Agriculture as the nineteenth state practically free of bovine tuberculosis, and the state was thus established as a modified accredited area, where tuberculosis among cattle has been reduced to less than one-half of one per cent. The other states include Indiana, North Carolina, Maine, Michigan, Wisconsin, Ohio, Idaho, North Dakota, Nevada, New Hampshire, Utah, Kentucky, West Virginia, Washington, Illinois, Oregon, Virginia, and Minnesota.

REGISTERED Clinical Laboratory Technicians of Indianapolis have organized, and held a meeting May ninth, when a temporary chairman was appointed to head a committee whose duty it will be to prepare a constitution and by-laws for the organization. There are fourteen registered technicians in Indianapolis, and it is hoped that technicians outside of Indianapolis who may be interested in the formation of a state organization will write to the above-mentioned chairman, Mrs. Marjorie Joiner, Research Department, City Hospital, Indianapolis. Regular meetings will start in September.

THE U. S. Civil Service Commission has announced open competitive examination for Anaesthetist, in the U. S. Public Health Service, applications for which must be on file with the U. S. Civil Service Commission, Washington, D. C., not later than June 3, 1935. Specified education and experience are required. Ordinary graduate nurse experience will not qualify. Full information may be obtained from the secretary of the United States Civil Service Board of Examiners at the post office or customhouse in any city which has a post office of the first or second class, or from the United States Civil Service Commission, Washington, D. C.

THE United States Civil Service Commission has announced open competitive examinations for protozoologists, applications for which position must be on file with the commission at Washington, D. C., not later than June 17, 1935. Applications are for positions of protozoologist, and associate and assistant protozoologists, U. S. Public Health Service. Information may be obtained from the Secretary of the United States Civil Service Board of Examiners at the post office or customhouse in any city which has a post office of the first or second class, or from the U. S. Civil Service Commission at Washington, D. C.

THE Woman's Auxiliary to the Madison County Medical Society will entertain members of the Marion County and Delaware-Blackford County auxiliaries and their husbands at the Grandview Country Club, in Anderson, June fifth. The program includes bridge and golf in the afternoon, dinner at six-thirty, and dancing following the program, which includes the following speakers: Mrs. F. W. Cregor, Indianapolis; Mrs. W. S. Tomlin, Indianapolis; Mrs. R. L. Compton, Osgood; Mrs. I. N. Trent, Muncie; Thomas A. Hendricks, Indianapolis; Dr. E. E. Padgett, Indianapolis; and Mrs. M. A. Austin, Anderson. Musical numbers will be contributed by Mrs. John Emhardt, Miss Florence Grosvenor, and Mary Kathryn Dunham.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Wm. S. Merrell Company
Diphtheria Toxoid, Alum Precipitated (Refined), ten 1 cc. vials (10 immunizations) package
U. S. Standard Products Co.
Polyanaerobic Antitoxin (Tetanus-Gas-Gangrene), Refined and Concentrated

---

PRESENT STATUS OF MEAD JOHNSON VITAMIN A RESEARCH AWARD

THIS award was originally established by Mead Johnson and Company, January 30, 1932. "Mead Johnson and Company announces an award of $15,000 to be given to the investigator or group of investigators producing the most conclusive research on the vitamin A requirements of human beings." (See J. A. M. A., January 30, 1932, pages 14-15.)

On February 11, 1933 (J. A. M. A., pages 12-13): "At the suggestion of the judges, a second (additional) award of $5,000 is now offered. The basis for this enlargement is in the obvious possibility that within the time limit set (December 31, 1934) no suitable evaluation of the vitamin A requirements of human beings will have appeared. On the other hand, a laboratory investigation may have been published which will point the way toward clinical evaluation."

On that date the judges for the award were announced:

Isaac A. Abt, Northwestern University; K. D. Blackfan, Harvard University; Alan Brown, University of Toronto; Horton R. Casparis, Vanderbilt University; H. F. Helmholz, Mayo Clinic; Alfred F. Hess, Columbia University; E. V. McCollum, Johns Hopkins University; L. B. Mendel, Yale University; L. T. Royster, University of Virginia; and Robert A. Strong, Tulane University.

The judges met in Detroit, April 10, 1935, and took the following action:

(1) To postpone until December 31, 1936, awarding of the main (clinical) award.

(2) To divide the second (laboratory) award, one-half to Dr. S. B. Wolbach, Harvard University, for his basic work on the pathology of avitaminosis A and his investigations on the regeneration of epithelial tissue impaired by vitamin A deficiency, and the relationship of vitamin A to the integrity of the teeth; and one-half to Dr. Karl E. Mason, Vanderbilt University, for distinguishing exactly between the pathology of avitaminosis A and avitaminosis E, and for his contribution to the quantitative relationship of vitamin A deficiency to the keratinization of germinal epithelia.

Checks for $2,500 each, in accordance with the decision of the judges, were promptly mailed to Dr. S. B. Wolbach and to Dr. Karl E. Mason.

INDIANA UNIVERSITY NEWS NOTES

Dr. William M. Mount of Kirklin, Ind., who was graduated from Indiana University Medical School last June, has been awarded a fellowship in the clinic of the Mayo Foundation at Rochester, Minn. Next October, Dr. Mount will join the staff of doctors at the famous hospital and will be employed there at least three years.

Dr. Mount at the present time is serving as an interne at the Methodist Hospital, Indianapolis, where he will remain until July 1.

Showing the improvement in medical instruments by a collection of old-time surgical and medical tools, and tracing the development of medical science through several centuries by displays of old medical books, is the purpose of Indiana University's medical museum and exhibit of early medical publications.

The museum recently has been established in the library of the Indiana University Medical Center in Indianapolis with the cooperation of the Indiana State Medical Association.

New gifts and loans of instruments for the collection have been received from individual donors throughout the state. The museum contains more than 50 items for display One of the earliest types of ophthalmoscopes, a complete set of surgical instruments, and an old hypodermic syringe are included in the collection loaned by Herbert T. Wagner, Jr., now a student in the Indiana University School of Medicine.

Saddle bags made to order for Dr. William H. Wishard, of Indianapolis (1816-1913), by a saddler of Southport, have been loaned to the museum by his son, Dr. William N. Wishard, of Indianapolis. The saddle bags were designed to carry medicines, and were made of heavy leather, to be swung across the saddle under the rider. Pills were carried in large pockets on either side. A pill roller, which was the property of Dr. James C. Pearson (1824-1901), an early Indiana doctor, who practiced in the vicinity of Mitchell, is the property of the museum.

The first hypodermic syringe used in Indiana, bought in Paris in 1867 and formerly the property of Dr. John M. Kitchen (1826-1916), well-known Indianapolis doctor during the second half of the nineteenth century, is an interesting item. The syringe operated with a screw which forced the contents from the tube into the vein of the patient, and the two needles of the syringe are of gold.

A stomach pump which was used during the last illness of former Governor Oliver P. Morton and which was the property of Dr. William Clinton Thompson (1812-1897), has been acquired for the museum.

SOCIETIES AND INSTITUTIONS

ALLEN COUNTY (FORT WAYNE) MEDICAL SOCIETY met at Irene Byron Hospital, May seventh, for a dinner meeting. Dr. Draper and his staff presented some interesting cases. Sixty-six members and eight guests attended. Movies on diphtheria prevention were shown and approved for release in local theatres during the immunization campaign.

At the April sixteenth meeting, Dr. C. C. Sturgis of Ann Arbor, Michigan, director of Simpson Memorial Institute for Research in Pernicious Anemia, was the principal speaker. His subject was "Treatment of the Anemias." Thirty-eight members and fifty-seven guests were present. The St. Joseph County Medical Society was invited to attend. The secretary reported a splendid meeting, with the possibility that it may be an annual event.

* * *

BOONE COUNTY MEDICAL SOCIETY met at Lebanon, April second, ninth, and sixteenth, for round table discussions in preparing a fee bill, and for discussions of FERA nursing. The members voted disapproval of any change in the present fees for caring for indigents. Boone County Medical Society now has fifteen members.

* * *

CARROLL COUNTY MEDICAL SOCIETY met April nineteenth in Delphi for a dinner meeting. Dr. E. E. Padgett of Indianapolis and Dr. Edward Ruschli of Lafayette were principal speakers. Plans were made for the district meeting to be held at Delphi May fifteenth.

* * *

CASS COUNTY MEDICAL SOCIETY members met at the Cass County Hospital, Logansport, April nineteenth, for the April dinner meeting. The subject discussed was "Oxygen Therapy." Speakers were Dr. Ford Hicks of Chicago and Mr. J. I. Banash, consulting engineer of Chicago.

* * *

CLARK COUNTY MEDICAL SOCIETY members discussed compulsory health insurance and state medicine as they affect physicians and nurses, at their meeting, held at the Clark County Memorial Hospital, April sixteenth. The principal address was "Compulsory Health Insurance," presented by Dr. Virgil E. Simpson of Louisville, Kentucky.

* * *

CLINTON COUNTY MEDICAL SOCIETY met at the Coulter Hotel, Frankfort, May second. Thomas A. Hendricks, executive secretary of the state association, spoke on "Medical Economics." The society passed a resolution, decrying any movement that might endanger the standing of the Clinton County Hospital, and recommending that no change be made in the x-ray department of the hospital. Dr. S. B. Sims read his report on the Early History of the Medical Profession in Clinton county.

* * *

DAVIESS-MARTIN COUNTY MEDICAL SOCIETY members met at Washington, April twenty-third, with eleven members present. The members worked out and accepted a new fee schedule. Dr. J. R. Rhorer of Elnora was accepted as a new member of the society.

* * *

DEARBORN-OHIO COUNTY MEDICAL SOCIETY met in Aurora, May second, to complete plans for the annual meeting of the Fourth District Medical Society. The ten members present passed a motion to the effect that members of this soceity will not assist in any group examination of school or pre-school children at school centers. This motion was designed to end summer school round-ups as carried out at present, in the belief that these examinations should be done by the family physician in his office. Indigent children will be cared for through cooperation with township trustees and regular relief channels.

DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY met at the Hotel Roberts, Muncie, April sixteenth. Dr. J. H. Clevenger of Muncie talked on "Urinary Retention Catheterization, and Cystitis Following Operations." Attendance numbered twenty-six.

* * *

At the May fourteenth meeting, Dr. Hugh A. Cowing presented a paper on "Obstetrics, Old and New."

* * *

FLOYD COUNTY MEDICAL SOCIETY met at New Albany, April twelfth, with Dr. Percy R. Pierson of New Albany as principal speaker. His subject was "Complications in Obstetrics."

* * *

FORT WAYNE ACADEMY OF MEDICINE AND SURGERY met at the Chamber of Commerce, April twenty-third, when Dr. J. T. Short presented a paper on "The Clinical Aspect of Urinary Calculi."

* * *

FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY members met at Perrysville, April thirtieth. Dr. O. O. Alexander of Terre Haute talked on "Goiter and Its Treatment." Forty-four members and guests were present.

* * *

GRANT COUNTY MEDICAL SOCIETY members heard Dr. L. G. Zerfas of Indianapolis discuss "Some Newer Things in Medicine" at the time of the April twenty-third meeting, held at the Hotel Spencer.

* * *

GREENE COUNTY MEDICAL SOCIETY members met at Bloomfield, April eleventh. Dr. M. L. Lillie of Jasonville was the principal speaker.

* * *

HENDRICKS COUNTY MEDICAL SOCIETY met April nineteenth near Belleville for a dinner meeting. Wives of members were present. Dr. Louis Segar of Indianapolis was the guest speaker. His subject was "Diseases of Children."

HENDRICKS COUNTY MEDICAL SOCIETY members met, April twenty-sixth, at Wilson's Chicken Dinner Home, near Center Valley. Dr. L. H. Segar of Indianapolis spoke on "The Newborn Child; Diseases and Treatment." Eleven members and their wives and four visitors attended.

* * *

HOWARD COUNTY MEDICAL SOCIETY members were guests of the Kokomo Kiwanis Club, April eighteenth, when Dr. Larue Carter of Indianapolis spoke on the subject of criminal insanity.

* * *

HUNTINGTON COUNTY MEDICAL SOCIETY members met at Huntington, May seventh, for a dinner meeting. Dr. F. B. Mitman read a paper on "Newer Ideas in Gynecology and Obstetrics." Attendance numbered fourteen.

* * *

INDIANAPOLIS (MARION COUNTY) MEDICAL SOCIETY met at the Athenaeum, April twenty-third, when papers were presented by Drs. M. N. Hadley and Byron Rust on the subject of "Appendicitis in Children." Discussants were Drs. Matthew Winters and Walter Stoeffler.

On April thirtieth, the program was allotted to surgeons. Dr. Sater Nixon discussed "An Aseptic Method of Temporary Valvular Enterostomy." Dr. J. V. Reed talked on "Acute Abdominal Trauma," and Dr. H. R. Allen spoke of "A New Method of Traction in the Case of Broken Neck."

The May seventh meeting was devoted to a discussion of arthritis. Papers were presented by Drs. J. O. Ritchey, Charles Thompson, and J. Jerome Littell.

"Treatment of Emergencies" was the topic of discussions presented at the May fourteenth meeting by Dr. R. N. Harger and Mr. Herbert T. Wagner. Dr. Harger talked on "Toxicology of Carbon Monoxide Poisoning," and Mr. Wagner, a junior in the Indiana University School of Medicine, discussed "Resuscitation by the Schafer Prone-Pressure Method."

JAY COUNTY MEDICAL SOCIETY met at the Portland Country Club, May third. Dr. James Victor Greenebaum of Cincinnati was the speaker. His subject was "Rickets." Attendance numbered twenty.

* * *

LAPORTE COUNTY MEDICAL SOCIETY met at the Spaulding Hotel, Michigan City, April eighteenth, to hear Dr. Aaron Arkin of Chicago talk on "Differential Diagnosis of Organic Heart Disease." Attendance numbered twenty-five.

* * *

LAKE COUNTY MEDICAL SOCIETY AND THE TENTH DISTRICT MEDICAL SOCIETY met at the East Chicago Elks' Club, May ninth. The program included a movie on breast surgery, a talk on the mechanism of heart beat and electrocardiography, by L. M. Hurxthal of Boston; an illustrated lecture on arthritis by E. E. Irons, Chicago; a paper on "Care of the Newborn," by Isaac A. Abt of Chicago; a paper on "Treatment of Abortion," by Davis S. Hillis of Chicago; discussion of "Treatment of Syphilis," by Samuel Becker, Chicago; and "Newer Work in Treatment of Cancer by Radiation," by Max Cutler of Chicago. Entertainment was supplied by the Endocrine Sisters and Asthma's Wheezing Orchestra.

* * *

MADISON COUNTY MEDICAL SOCIETY members met at Anderson, April fifteenth. Dr. F. C. Guthrie of Anderson talked on "Cardiac Pathology and Its Interpretation." Attendance numbered thirty-five.

* * *

MUNCIE ACADEMY OF MEDICINE members heard Dr. Paul Starr of Chicago talk on "The Clinical and Physiological Relation of the Pituitary to the Thyroid" at the April thirtieth meeting, held in the Hotel Roberts.

At the May seventh meeting, Dr. Larue D. Carter of Indianapolis presented a paper on "Meningitis."

On May twenty-first, Dr. Karl Menninger of Topeka, Kansas, lectured.

* * *

MONTGOMERY COUNTY MEDICAL SOCIETY members met at Culver Hospital, April twenty-fifth, to hear Dr. B. N. Lingeman discuss "Common Eye Diseases," and Dr. W. Dodds talk on "Anemias." Attendance numbered twenty-two.

* * *

NORTHEASTERN INDIAND ACADEMY OF MEDICINE met at Kendallville, April twenty-fifth. Dr. George H. Gardner of Chicago presented a paper on "The More Common Pelvic Infections."

* * *

PARKE-VERMILLION COUNTY MEDICAL SOCIETY saw a motion picture on "Malaria" at its April seventeenth meeting at the Vermillion County Hospital. This was a dinner meeting.

* * *

PUTNAM COUNTY MEDICAL SOCIETY members met at Greencastle, May fifteenth, with Dr. Homer H. Wheeler of Indianapolis as principal speaker. Dr. Wheeler's subject was "General Considerations of Diseases of the Ano-Rectal Region."

* * *

RANDOLPH COUNTY MEDICAL SOCIETY members heard Mr. Albert Stump of Indianapolis, attorney for the Indiana State Medical Association, when their regular meeting was held at Union City, May thirteenth. The Randolph County Hospital Guild held its regular May meeting at the same time.

* * *

SHELBY COUNTY MEDICAL SOCIETY met at Shelbyville, May first, for the regular monthly meeting. Dr. George Garceau of Indianapolis was the speaker. His subject was "Body Mechanics and Feet."

* * *

ST. JOSEPH COUNTY MEDICAL SOCIETY members heard Dr. Douglas W. Owen of South Bend speak on "Vienna, the Mecca of Medicine in Europe," at the April ninth meeting

held in South Bend. Fifty-eight members and eight guests attended.

A fine meeting was held in Fort Wayne, April sixteenth—a good will dinner meeting with the Allen County Medical Society. Fifty-one members from St. Joseph County attended.

On April twenty-fourth, the St. Joseph County Medical Society held its meeting at Mishawaka, under the auspices of the Mishawaka Physicians' Club. Dr. Robert M. Moore of Indianapolis talked on "Heart Disease." Fifty-eight members and twenty-four guests were present.

Mrs. H. C. Wurster and J. V. Cassady discussed "Ionization Treatment of Allergic Rhinitis" before the thirty-two members and two guests present at the April thirtieth meeting of the St. Joseph County Medical Society. At this meeting, Dr. H. H. Rodin was elected to membership.

* * *

SULLIVAN COUNTY MEDICAL SOCIETY members met at the Mary Sherman Hospital, May first, for a dinner meeting. Dr. C. G. Culbertson of Indianapolis spoke on "Essential Laboratory Tests."

* * *

TIPTON COUNTY MEDICAL SOCIETY and the Tipton County Dental Society held a meeting at the Elks' Home in Tipton, April eighteenth. Plans were made for entertaining the district society in May. The speaker was Dr. Thayer Waldo, D. D. S., of Indianapolis. The Tipton County Medical Society voted to close their offices at noon on Thursday of each week. members voted to close their offices at noon on Thursday of each week.

* * *

TIPPECANOE COUNTY MEDICAL SOCIETY met at Lincoln Lodge, Lafayette, May ninth. Dr. Frank E. Sayers of Terre Haute discussed "Inflammation of the Colon." Attendance numbered sixty. Mr. Marshall of the Governor's Committee was present to discuss future medical relief.

* * *

WAYNE-UNION COUNTY MEDICAL SOCIETY held a dinner meeting at the Richmond Leland Hotel, Richmond, April twenty-fifth, with Dr. Charles Coleman of Dayton, Ohio, as principal speaker. Dr. Coleman's subject was "Nephritis." Dr. Samuel Kennedy discussed the Wagner and Epstein bills, and after some discussion it was decided to telegraph protests to senators and to the President. Attendance at this meeting numbered thirty.

* * *

WELLS COUNTY MEDICAL SOCIETY met at the Bliss House in Bluffton, May tenth. Dr. Claude F. Dixon of Rochester, Minnesota, presented a paper on "Cancer of the Colon." Physicians from neighboring counties attended.

THE INDIANA STATE MEDICAL ASSOCIATION

EXECUTIVE COMMITTEE

April 14, 1935.

Meeting called to order at 10:35 a.m.

Roll call showed the following present: W. H. Kennedy, M. D.; H. H. Wheeler, M. D.; W. J. Leach, M. D.; O. O. Alexander, M. D.; R. L. Sensenich, M. D.; A. F. Weyerbacher, M. D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary. Guest, Verne K. Harvey, M. D.

Minutes of the meeting of March 10, 1935, approved.

The committee discussed the policy which has been adopted by the Bureau of Publicity of paying from State Association funds the expenses of speakers who are asked to make talks by the Bureau of Publicity. It has been the rule of the Bureau that whenever it has asked a man to speak in a locality different from the one in which he resides, the actual expenses of this speaker shall be paid by the Bureau, if they are not paid by the local county medical society before which he talks. The Executive Committee feels that it is honor enough for any man to speak upon behalf of the State Association through the Bureau of Publicity, and that expenses should not be paid. The secretary was instructed to inform the Bureau of Publicity of the feeling of the Executive Committee in regard to this matter.

The monthly statements of receipts and expenditures and reports of the budget for March for the Association committees and THE JOURNAL were presented.

Membership Report

Number of members on April 13, 1935	2,520
Number of members on April 13, 1934	2,491
Gain over last year	29
Number of members on December 31, 1934	2,741

Suggestion was made that the secretary prepare a pamphlet to be sent to physicians who are eligible to membership in the local county medical society and yet are not members in the local county and state medical associations, telling them of the advantages of membership in the American Medical and the Indiana State Medical Associations. Dr. Leach spoke of the fact that many good physicians in Crawford, Harrison, and Dubois counties should be members of the Association and are not members. Suggestion made that those who are not members in the county medical society, and yet are eligible to membership, be sent complimentary copies of THE JOURNAL for three months, along with a letter and material which would show them the advantages of affiliating themselves with organized medicine. Only those who are officially approved by the secretary of each county medical society should be placed upon this complimentary mailing list.

1935 Meeting at Gary

(1) Acceptances have been received from everyone but Roy W. Scott, M. D., Cleveland, Ohio.

(2) Commercial exhibit announcement to be sent out May 15.

Legislative and Legal Matters

Report of the State Committee on Governmental Economy, including the new set-up of county welfare administration under social service workers, brought to the attention of the committee. Editorial prepared for May JOURNAL approved by committee, and suggestion made that galley proof of editorial be sent to each newspaper in the state.

H. R. 7260, the Doughton bill, introduced in Congress April 4 in place of the Wagner-Lewis bill. This is the social security bill, Section VI of which gives an appropriation to the United States Public Health Service to be allotted to the various state health departments as the individual states match federal funds. As written, the hill places medical supervision in the Department of Labor, which is vigorously opposed by the American Medical Association and the Indiana State Medical Association. Dr. Harvey discussed this hill. A committee, composed of Dr. Gatch, Dr. Sensenich, and Dr. Harvey, met with the Governor several months ago concerning the Wagner-Lewis bill and its provisions. Correspondence with the American Medical Association, Walter Bierring, M. D., and A. T. McCormack, M. D., brought to the attention of the committee. Future action of the State Association in regard to this matter will depend upon the form given this bill by Congress and whether or not a special session is called in Indiana.

Tax Problem. If there is a special session and a two per cent or three per cent retail sales tax is enacted, immediately the question arises as to the justice of lowering business men's and merchants' gross income tax and not lowering the gross income tax on professional men. The plan contemplated would be cutting the gross income tax from one per cent to one-fourth of one per cent on merchants and certain other groups if a retail sales tax is enacted.

A bill proposing a three per cent gross income tax on physicians has been introduced in the Illinois Assembly.

Veterans' Hospitals. Attention of the committee brought to the fact that many bills have been introduced in Congress favoring the building of veterans' hospitals. This will renew the battle against the continuation of the policy of government hospitals competing with private hospitals and will mean increasing the number of available beds, when at the present time private hospitals are having a struggle to exist, due to the fact that their beds are not occupied. The Legislative Committee of the American Medical Association is in touch with the situation at the present time.

Attention of the committee brought to the fact that Robert Jolly, president of the American Hospital Association, also complained against the government competing with private hospitals in his recent talk before the American College of Surgeons at Cleveland.

Complaint received from Dr. William R. Davidson, secretary of the State Board of Medical Registration and Examination, concerning the suggestion contained in the report of the Indiana State Committee on Governmental Economy, which would unify all state licensing boards. Dr. Davidson's letter states that in other states where a unified board has been attempted experience has shown that this is not a satisfactory arrangement.

Attention of the committee brought to the new law passed in New York giving medical societies the right to recommend qualified physicians for various phases of compensation work.

Indigent Sick

(1) Report made to the committee that Charles Marshall, of the Governor's Commission on Unemployment Relief, is making talks before county medical societies, taking up problems and questions that arise in each individual society concerning poor relief work. At the present time it is the policy of the relief commission to handle these questions separately in each county rather than setting down a hard and fast set of rules to be applied rigidly throughout the entire state.

(2) Report from Ohio paper in regard to threatened strike of physicians in Trumbull County, Ohio, because in relief cases the bills of physicians were slashed to 18 cents on the dollar, read to the committee. This means that a physician caring for the indigent is receiving only 18 cents for an office call, 36 cents for a house call, 45 cents for a house call at night, and $3.60 for confinement cases.

(3) Preliminary plan in regard to rendering services to the indigent sick prepared by the state relief office to be reported on at next meeting by Dr. O. O. Alexander. Dr. R. G. Leland, director of the Bureau of Medical Economics of the American Medical Association, stated that in this plan, under the paragraph, entitled "Choice of Physician," there appeared to be an opening in the wording of the draft which might allow for someone other than the patient to select the physician.

Sickness Insurance

(1) Releases are being prepared by the Bureau of Publicity against sickness insurance.

(2) Letter to individual physicians. Copy of bulletin to be sent to all members of the State Association submitted by Dr. Sensenich and approved by the Executive Committee. This is to be a printed bulletin sent to each physician and enclosed with it are to be three pamphlets prepared by the American Medical Association: "A Critical Analysis of Sickness Insurance"; "Sickness Insurance Catechism"; and "Sickness Insurance Not the Remedy."

(3) Milbank, Auerbacher, Mitchell correspondence brought to the attention of the committee.

Editorial that appeared in the *Detroit Medical News*, entitled "Questions to the Milbank Fund," read by committee.

(4) Statement in Sedgwick (Kansas) County Medical Society bulletin that socialized medicine is already under way brought to the attention of the committee as typical of the viewpoint expressed in many medical publications.

(5) Reports received from Terre Haute Contact Committee.

(6) Dr. Alexander Cavins assigned by Executive Committee to attend a meeting at the American Medical Association headquarters to discuss community medical service projects at Chicago on April 27. Dr. Norman Beatty of Indianapolis was selected by the Indianapolis Medical Society to attend that meeting as its representative.

(7) Indianapolis physician solicited to start contract practice clinic, according to report brought to the attention of the committee. Promoters state that if the physicians of Indianapolis do not take part in this clinic, physicians from other cities will be imported.

(8) Copy of the questionnaire sent to the county societies by the American Medical Association in regard to medical service plans brought to the attention of the committee.

(9) Announcement that Professor E. H. Sutherland has been appointed to succeed Dr. U. G. Weatherly in the work of sociology at Indiana University brought to the attention of the committee.

(10) Article in the March 18 number of *Time*, stating that Dr. James S. McLester, president-elect of the American Medical Association, and a large group of doctors are to take a trip to Soviet Russia next August, brought to the attention of the committee. According to the clipping, the physicians are to visit hospitals, clinics, sanatoriums, meet with leaders of the medical world in Russia and elsewhere, and come into direct contact with the Russian system of medical practice.

(11) Short bulletin prepared by Dr. M. A. Austin in regard to state medicine read and enjoyed by the committee.

Postgraduate Work and Future Meetings

Preliminary program for postgraduate course at Evansville brought to the attention of the committee, along with the dates of the various district meetings in May.

Suggestion in Regard to High School Essays

This suggestion, made by Dr. George V. Cring of Portland, is to be brought up for further consideration at the next meeting of the committee.

Inactivity of Crawford County

The executive secretary reported that no answer had been received in regard to the inactivity of Crawford County.

Diphtheria and Tuberculosis Campaigns

(1) Protest of Miami County Medical Society against tuberculosis campaign as carried on under the direction of a social service worker brought to the attention of the committee.

(2) Correspondence in regard to the diphtheria immunization situation at Lyons, Indiana, brought to the attention of the committee.

Complaint in Regard to Solicitation of Business by Clinic

Correspondence from the councilor of the Tenth District and the secretary of the Lake County Medical Society in regard to this situation brought to the attention of the committee.

Leading Companies Solicit Osteopathic Trade

Complaint from C. G. Munns, secretary of the Kansas Medical Society, in regard to this matter, brought to the attention of the committee. The committee felt that it could take no action upon this at the present time.

Physical Examination of Pre-school Children

Hammond Medical Society resolutions against giving physical examinations to pre-school children free of charge, as advocated by the Parent-Teacher group of Hammond, discussed by the committee. The committee suggested that a letter be written the Hammond society, stating that the Executive Committee felt that the medical society should not give examinations free of charge to anyone able to pay.

Old People's Home Foundation at New Carlisle, Indiana

Dr. Sensenich was unable to give much information in regard to this foundation, further than saying that he understood that this institution had been endowed some time ago, and as far as he knew it is reputable.

Listing of Names of Physicians by a Surety Company

A surety company gives a list of physicians who are to be called in case of accident. This list is to be hung in a place of easy reference in the establishment of the policyholder. The committee felt that there was nothing to be done in regard to this.

Injection Treatment for Hernia

Complaint about a letter that is being sent to insurance companies by a surgeon concerning the injection treatment for hernia brought to the attention of the committee.

Minnesota State Medical Association Exhibit, June 24-26

State Association asked to exhibit at the Minnesota state meeting. This invitation was referred to the State Division of Public Health in case the State Division should want to make an exhibit of the new Indiana Plan for health educational activities.

Protest Against Removal of Dr. Max Bahr from Central State Hospital

Letter protesting against the removal of Dr. Max Bahr as superintendent of the Central State Hospital brought to the attention of the committee. The committee went on record confirming the principle to which the Indiana State Medical Association has always adhered, namely, that the State Association cannot concern itself with the candidacy or the desires of any individual physician to hold public office, but it can only concern itself with the fact that whenever a physician is appointed to public office he should be a member in good standing of the Indiana State Medical Association.

The Journal

(1) Correspondence in regard to Medical Publications, Inc., brought to the attention of the committee.

(2) Letter and material from Dr. Hugh A. Cowing. The Executive Committee felt that "The Voice of the Doctor" had been arranged so persons could express their thoughts and that Dr. Cowing's letter should be placed in that column.

(3) Two advertising accounts, totaling $55.00, have not been paid. The committee approved the suggestion that these accounts be turned over to an attorney for collection.

(4) Letters from National Publishers' Association and Periodical Publishers' Institute brought to the attention of the committee along with Dr. Woodward's letter suggesting that it would be well for organized medicine to take no active part in the contest to defeat the Wagner bill, S. 1958, against which these publications made complaint.

Apportioning of JOURNAL funds. Letter from Dr. Sensenich in regard to apportioning THE JOURNAL funds brought to the attention of the committee.

BUREAU OF PUBLICITY

April 9, 1935.

Meeting called to order at 3:30 p. m.

Present: J. H. Stygall, M. D.; E. D. Clark, M. D.; and T. A. Hendricks, executive secretary. (Matters were taken up with William N. Wishard, M. D., chairman, previous to the meeting.)

The release, "Eye Examinations," which was prepared upon the suggestion of an opthalmologist, was reviewed and approved for publication in Monday papers, April 22.

May Day release upon immunization approved for publication on April 15.

Preliminary draft of release against the socialization of medicine brought to the attention of the Bureau of Publicity. Report of suggestions to be made by the bureau members at next meeting.

District society meetings to be held in May follows:

Fifth District, May 3, Terre Haute.
First District, May 8, Evansville.
Sixth District, May 9, Rushville.
Third District, May 10, Corydon.
Eleventh District, May 15, Delphi.
Eighth District, May 15, Anderson.
Fourth District, May 16, Rising Sun.
Ninth District, May 22, Tipton.
Twelfth District, May 23, Lake James.
Tenth District, May 9, East Chicago.

The following letter was received from the tuberculosis campaign committee chairman, who was appointed by the Bureau of Publicity:

"The plan for the tuberculosis survey was presented at a meeting of the council of the Indianapolis Medical Society at its February meeting and was passed upon favorably. That same night, at the regular meeting of the medical society, a motion adopting the tuberculosis survey of Washington High School was passed. This was referred to the child health committee chairman.

"Because of much comment, favorable and unfavorable, the council called a special meeting with the tuberculosis and x-ray specialists. I attended this meeting. Following the discussion practically every one expressed himself as being in favor of carrying out the survey. The x-ray men preferred to have the x-rays taken at the school by a commercial company. A bid was obtained from an x-ray company of $2.25 per film.

"It had been planned to start the survey in February but because of various unavoidable delays, it is postponed until next fall.

"In general, I think it may be said that most men saw the survey as a worthy and desirable project. Most of the discussion originated in the two special bodies mentioned above. The tuberculosis specialists after making critical comments expressed themselves as desirous of having the survey proceed. One man only took the opposite view. The x-ray men were not enthusiastic but seemed perfectly willing to have the survey proceed, provided the pictures were taken elsewhere than at their offices. They are perfectly willing to interpret the films."

The bureau was favorable to the suggestion of the executive committee that it help out in carrying some of the expense for the electrotypes which are used in connection with the historical articles that appear in THE JOURNAL.

There being no further business, the meeting was adjourned.

INDIANA DIVISION OF PUBLIC HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report, April 1935

Diseases	Apr. 1935	Mar. 1935	Feb. 1935	Apr. 1934	Apr. 1933
Tuberculosis	225	173	121	84	154
Chickenpox	497	721	526	395	304
Measles	1,819	2,764	2,107	3,953	817
Scarlet fever	724	1,042	1,067	721	944
Smallpox	9	4	14	2	13
Typhoid fever	2	7	5	28	8
Whooping cough	335	202	150	413	122
Diphtheria	75	94	152	68	80
Influenza	144	277	413	73	146
Pneumonia	124	97	133	31	44
Mumps	109	114	69	59	171
Poliomyelitis	1	1	2	1	3
Meningitis	24	19	12	6	16
Vincent's Angina	1	0	0	0	0
Encephalitis	4	4	1	0	0

THE AVERAGE DOC'S LIFE

When the last demonstration is mastered
And the "stiffs" are dissected and dried,
When the youngest prosector's been murdered
And the oldest professor has died,
We shall sleep—and, faith, we shall need it,
Lie down for a minute or two
To dream about clinics and cases,
And forget about dogs, slides, and gue.

And those who have "busted" (poor devils),
Shall head out for old Arkansaw,
And if they flunk there, does it matter?
No! There still is the study of law.
While those who have passed shall be happy,
They shall climb the City Hospital stair.
They can wander around in the wards
And pretend they're in residence there.

They shall have live people to work on
In Surgery, Path., and O. B.
And if they don't murder too many
Someday they may get an M. D.
Then, what a future before them!
A second-hand Buick, a wife,
Two kids and a half-paid-off mortgage—
The end of an average "Doc's life"!

—J. F., Ind. Univ. Med. School, '37.

CONCERNING "DOG HAIR AND DYNAMITE"

(Continued from page 296)

of the 97 are junior members; for the most part, they are the younger ones. To be a full member of the American Association a person must be a college graduate, must have had one year at an approved school of social work, and must have had two years of employment in an approved social agency. Certain "equivalents" are permitted for a part of this requirement.

The school of social work of Indiana University is known as the Training Course for Social Work. The editor takes several pot-shots at the writer because of his connection with the Training Course. He does not like the "so-called trained social workers," but he has fleas in his pants when training is mentioned. Apparently there is not much that can be done for him. However, a brief explanation of what training is may not be amiss. The Indiana University Training Course for Social Work admits students at present who have had three years of college work, provided they have had the proper prerequisites in the social sciences and psychology. Beginning September 1, 1936, it will admit only college graduates, and it will require a minimum of three semesters' work for the degree of Master of Arts. Courses are offered in case work methods, public welfare administration, community organization, the history of charity and social work, social statistics, medical and psychiatric information, field practice and research. The demand for social workers is so great that we rarely keep a student for the full two years of training. It is just as much a duty of Indiana University to train young men and women of Indiana for social work as it is to train others for teaching, law, medicine or dentistry. Public welfare is a branch of the public service, and we shall have improvement in the public service just as rapidly as, and no more rapidly than, qualified personnel is trained. Indiana University has, since 1911, been offering training in social work, and the probability is that it will continue to do so indefinitely.

I pass over some of the erroneous statements and exaggerations made by the writer for lack of space and charge them off as entertainment for the medical profession.

Why not do something about this row between the doctors and the social workers? The doctors have been sniping at the social workers for years, and the social workers have done no better. If the Indiana State Medical Association would appoint a Committee on Social Service and the Indiana Chapter of the American Association of Social Workers would appoint a Committee on Health Problems, these two committees could meet and discuss points of conflict and misunderstandings and could consider in constructive ways some of the problems which involve both professions. There would be less dog hair and no dynamite in the discussions of both sides.

ABSTRACTS

SURGICAL DIATHERMY OF CARCINOMA OF THE RECTUM

While the glass tube method of surgical diathermy at first seems rather absurd after the brilliant results obtained from the radical removal of the lower portion of the sigmoid colon and the rectum for carcinoma of the rectum are considered, ALFRED A. STRAUSS, SIEGFRIED F. STRAUSS, ROBERT A. CRAWFORD and HERMAN A. STRAUSS, Chicago (*Journal A. M. A.*, April 27, 1935), feel that the excellent results that they have obtained in their experience of seven years and the simplicity with which the procedure can be performed speak in favor of giving the method a thorough trial for a period of five years more, in which they hope to report a much larger series of cases. They lay great stress on the fact that in twenty-two cases excellent results were obtained without colostomy, the patient having full use of the rectum. They believe in the radical and segmental removal of the entire ascending, transverse or descending colon for carcinoma, when the continuity of the intestine can be re-established and the patient can defecate normally. It is, however, quite another matter to remove the lower part of the sigmoid colon and the rectum and leave the patient with a permanent colostomy opening. While it may be gratifying to the surgeon to demonstrate a series of such cases many years afterward, the authors do not believe that many of the patients are happy. The authors are particularly interested in the method since it is the first one in which local destruction of, or local application to, a carcinomatous growth has produced, clinically at least, a permanent systemic effect. It seems to destroy the toxins which are absorbed from the carcinomatous tissue, this reaction probably being brought about by an intense stimulation of the reticulo-endothelial system. What the substances are that are liberated by the destruction of the carcinoma by diathermy is a subject for further research.

* * *

BACK STRAIN AND SCIATICA

FRANK R. OBER, Boston (*Journal A. M. A.*, May 4, 1935), points out that when roentgenograms of the sacro-iliac and lumbosacral joints are presented which show no evidence in this region of any pathologic condition, either congenital or acquired, it would seem difficult to make a positive diagnosis of either sacro-iliac or lumbosacral strain. One is frequently troubled by the fact that there is a negative roentgenogram of a patient whose clinical signs and symptoms are those of extreme irritation in the sacro-iliac or lumbosacral joints. As a result of observation and examination of a number of cases of this type, it has been discovered that the iliotibial band is an exceedingly important factor in the occurrence of lame backs, with or without an associated sciatica. It has been observed in many patients with low back disturbances that the iliotibial band is extremely tight and prominent when the patient is lying on his back, with the knees together, or when he is in the erect position. The band is very rigid, almost bonelike in consistency, when under tension, usually about one-half inch wide, and is raised above the level of the fascia lata, with which it connects anteriorly and posteriorly. Patients who have this contracture complain of the low back pain as a sensation of strain in the lower part of the back in the region of the lumbar and sacral bones or in the sacro-iliac articulations. Severe sciatica is associated quite often with the condition and there also may be pain along the lateral femoral cutaneous nerve and occasionally along the distribution of the femoral nerve. Those who have the double contracture may show sciatic irritation on one side or both sides, or alternating attacks. The author concludes that the contracted fascia lata is a common cause of lame backs and has been unrecognized. If this is so it would seem, in the presence of normal roentgen studies, that fusion of the sacro-iliac or lumbosacral regions should not be done. When the fascia lata is contracted it must produce bad posture. Therefore, apparatus designed to hold the abdomen or the back, or exercises given to straighten the back, will be ineffectual against such severe contractures. The treatment of this condition is the relief of the contracture. In those cases in which there is no sciatica or other pain the low back pain may be relieved by stretching exercises; in those in which there is a severe sciatica, operation is indicated.

BOOK REVIEWS

BOOKS RECEIVED

THE PRINCIPLES AND PRACTICE OF UROLOGY. By Frank Hinman, A. B., M. D. Clinical Professor of Urology at the University of California Medical School. 1111 pages with 513 illustrations and 48 tables. Cloth. Price $10.00. W. B. Saunders Company, Philadelphia and London, 1935.

* * *

ELECTROTHERAPY AND LIGHT THERAPY. By Richard Kovacs, M. D., Clinical Professor and Director of Physical Therapy, Polyclinic Medical School and Hospital, New York. Second edition, thoroughly revised. 696 pages. Illustrated with 263 engravings and a color plate. Cloth. Price $7.50. Lea and Febiger, Philadelphia, 1935.

* * *

ECONOMIC PROBLEMS OF MEDICINE. By A. C. Christie. M. S., M. D., Professor of Clinical Radiology, Georgetown University Medical School, and member of the Committee on the Costs of Medical Care. 242 pages. Cloth. Price, $2.00. The Macmillan Company, New York, 1935.

* * *

FAILURE OF THE CIRCULATION. By Tinsley Randolph Harrison, M. D., Associate Professor of Medicine, Vanderbilt University School of Medicine. 396 pages. Cloth. Price, $4.50. The Williams and Wilkins Company, Baltimore, 1935.

* * *

DOCTORS AND JURIES. The Essentials of Medical Jurisprudence. By Humphreys Springstun of the Detroit Bar. 155 pages. Flexible fabrikoid. Price, $2.00. P. Blakiston's Son and Company, Philadelphia, 1935.

* * *

TEXTBOOK OF BIOCHEMISTRY. Edited by Benjamin Harrow, Ph. D., Associate Professor of Chemistry, The City College, College of the City of New York and Carl P. Sherwin, M. D., Sc. D., Dr. P. H., LL. D. Member of the Staff of St. Vincent's Hospital and French Hospital, New York City. 797 pages with 52 illustrations. Cloth. Price, $6.00. W. B. Saunders Company, Philadelphia, 1935.

* * *

CLINICAL MANAGEMENT OF SYPHILIS. By Alvin Russell Harnes, M. D., chief of the congenital luetic clinic of New York Hospital. 71 pages. Cloth. Price $1.50. The MacMillan Company. New York, 1935.

* * *

BOOKS REVIEWED

MEDICAL CLINICS OF NORTH AMERICA. November 1934. New York Number, Volume 18, Number 3. Cloth. Price $16 per year (published bi-monthly). W. B. Saunders Company, Philadelphia, 1934.

The November 1934 number of *Medical Clinics of North America* appears in its old format but announcing a new policy. The advertisement reads that "Hereafter the *Medical Clinics of North America* will feature the every-day run-of-practice problems of the general practitioner. Emphasis will be placed upon diagnosis and treatment." This promise is entirely fulfilled with the splendid contents of the November number. Harlow Brooks, Earnest Boas, A. M. Master, Harry L. Jaffe, and Harold J. Stewart present a symposium on heart disease, the quality of which is guaranteed by the names of the contributors. And so throughout the book, eminent men have contributed articles on such practical subjects as the treatment of menstrual disorders, the treatment of migraine, of intestinal amebiasis, antitoxin treatment of erysipelas, etc.

With all, the volume maintains the high standard always set by this particular journal, with the added advantage of eminent practicability.

PROFESSIONAL PROTECTION

SINCE 1899 SPECIALIZED SERVICE

A DOCTOR SAYS—

"The thoroughness with which the case was prepared was not only a revelation to me but a great consolation. The efficiency of your legal department is of the highest order. Every minute detail was thoroughly covered regardless of the time and expense involved."

THE MEDICAL PROTECTIVE COMPANY
OF FORT WAYNE, INDIANA
WHEATON, ILLINOIS



PHYSICIANS' BAGS
COWHIDE
$7.98 and up
Gold Lettered

Buy from a Leather Store and Save

GAUSEPOHL TRUNK CO.
51 Monument Circle --- Indianapolis

Important to Your Babies!

ACCEPTED AMERICAN MEDICAL ASSN. Committee on Foods



Larsen "Freshlike" Strained Vegetables are first quality garden fresh vegetables cooked, strained and sealed under vacuum to protect vitamins and mineral salts. For further protection we seal in special enamel lined cans.

All Varieties 10c Per Can

LARSEN'S *"Freshlike"* Strained Vegetables

THE LARSEN COMPANY, Green Bay, Wis.



Economical 5-lb can of Cocomalt for hospitals institutions and schools

ACCEPTED AMERICAN MEDICAL ASSN. Committee on Foods

HIGH IN FOOD-VALUE
—low in price

COCOMALT is available in 5-lb. cans, at a special price, for hospitals and other institutions.

This delicious food-drink is high in caloric value—rich in Vitamin D—easily digested and quickly assimilated. Mixed with milk as directed, it adds 70% more food-energy value. It increases the protein content 50%, carbohydrate content 170%, calcium content 35%, phosphorus content 70%.

Cocomalt is accepted by the Committee on Foods of The American Medical Association. Prepared by an exclusive process under scientific control, Cocomalt is composed of sucrose, skim milk, selected cocoa, barley malt extract, flavoring and added Vitamin D (irradiated ergosterol). (30 Steenbock—81 U.S.P. revised—units of Vitamin D per ounce of Cocomalt.)

Sold also in ½-lb. and 1-lb. air-tight cans, at grocery and drug stores.



Free to Doctors

For a sample can of delicious Cocomalt, send your name and address to R. B. Davis Co., Dept. S-66, Hoboken, New Jersey.





BOOK REVIEWS—Continued

MARTINI'S PRINCIPLES AND PRACTICE OF PHYSICAL DIAGNOSIS. Edited by Robert F. Loeb, M. D., Associate Professor of Medicine, College of Physicians and Surgeons, Columbia University. From the authorized translation by George J. Farber, M. D., 213 pages, with 30 illustrations in the text. Cloth. Price $3.00. J. B. Lippincott Company, Philadelphia, 1935.

A review of Martini's book should include an observation of the statement on "Perception" by Martini, in which he states "The physician must exhaust all diagnostic possibilities. He must see, listen, and observe, palpate and auscultate to the limit of his ability . . . this book is dedicated to teaching the essentials of seeing, hearing, and feeling in their relation to the body in health and disease." That really tells the story except to state that the make-up of the book together with its understanding of the subject material makes the book a very valuable one. The section on the electro-cardiographic studies is clear and tends to make that subject, which is a bug-bear to many doctors, one with which the doctor can at least be familiar. For a book of 210 pages on physical diagnosis, this one is most satisfactory.

* * *

A SYNOPSIS OF MEDICINE. By Henry Letheby Tidy, M. A., M. D., physician to St. Thomas's Hospital, London. Sixth edition, revised and enlarged. 1112 pages. Cloth. Price, $6.00. William Wood and Company, Baltimore, 1934.

For an author to find that there has been enough change in his material in the short space of four years to completely revise his text-book, causes one to wonder whether the preceding volume actually was up-to-date when published. In the case of Tidy's synopsis, there is no mistake about the quality of the previous editions, since five have been most extensively used and sold. The author enumerates the subjects that have so materially changed since 1930, almost apologizes for the necessity of having to bring out a new edition, but a glance at the changes prove the point of necessity as having been well taken. Casually open the book to chapter LXX, Vitamins, and there may be found a most complete and easily readable discussion of the facts that concern the points we as physicians should know. It tells of the discovery of vitamins, the properties of the various vitamins, the vitamins recognized at present, and of experiments with purified diets; in fact, everything that the general practitioner needs to know about the subject is told.

Open the book anywhere and you may read, at a glance, the etiology, morbid anatomy, symptoms, diagnosis, and treatment, all carefully and briefly edited. He says that the parathyroid glands were dismissed in the first edition in fifteen lines, but now he devotes thirteen pages to the subject, Thus, the book offers important information and in the quantity the subject material demands.

This reviewer has found the new edition a most satisfactory survey of internal medicine, and will continue to turn frequently to the volume for guidance.

* * *

GYNECOLOGY. By Brooke M. Anspach, M. D., Professor of Gynecology, Jefferson Medical College, With the assistance of Philip F. Williams, M. D., Assistant Professor of Obstetrics, School of Medicine, University of Pennsylvania, and Lewis C. Scheffey, M. D., Assistant Professor of Gynecology, Jefferson Medical College. Fifth edition. Cloth. Price, $9.00. Pp. 832 with 679 illustrations. Philadelphia, London, and Montreal. J. B. Lippincott Company, 1934.

This is the fifth edition of Anspach's Gynecology. The second, third and fourth editions were revisions. This edition has been completely re-edited, re-set and re-illustrated with the assistance of P. F. Williams and L. C. Scheffey. The chapters on diseases of the external genitalia, endometriosis, ovarian tumors, amenorrhoea, uterine bleeding, sterility and dysmenorrhoea have been re-written. New chapters have been added on constitutional types, endocrine disorders, newer uses of radium and radium implantation, and the electrocautery.

The scope of the book takes in both medical and surgical gynecology and also the subjects in close relation to or useful

BOOK REVIEWS—Continued

in dealing with gynecology such as diseases of the urethra, bladder, kidneys and ureters, diseases of the anus and rectum, diseases of the abdominal viscera and vaccine and serum therapy. Although the specialist in gynecology no doubt has special works on these allied subjects, the average practitioner who desires a good work on gynecology in his library will be glad to have these related subjects included. Especially helpful are the chapters on urinary disorders.

The illustrations are excellent; ten of them are in color. The operations thought to be most useful by the author are described. Pathology has a prominent place.

For the student or practitioner who wants a well-balanced book dealing carefully with all phases of gynecology, more complete than a handbook, this work will meet that need.

* * *

THE MODERN METHOD OF BIRTH CONTROL. By Thurston S. Welton, M. D., F. A. C. S. 168 pages. Cloth. Price $3.00. Walter J. Black, Inc., New York, 1935.

This is perhaps the most practical book on the "rhythm" method of birth control written for the lay reader. The calendar wheel of Miller, Schulz and Anderson is elaborated upon and separate charts are given for both the regularly and the irregularly menstruating woman, making it easy for her to calculate or rather see calculated her fertile and non-fertile periods.

There is a great deal of repetition but this is no doubt necessary to impress the lay reader with the importance of the statements. Some parts may have been too hurriedly or carelessly written, for example, "The mother's blood flows in and around the placenta and through the cord to the child. * * *. The child's blood flows back through the cord to the placenta, carrying off waste-products." The reviewer knows of no authority for the statement that the mother's blood flows to the child or that the mother's and child's blood are ever mixed.

Likewise the statement that, "When the female is deprived of the *nutritional* value of spermatic fluid by methods of contraception, both local and general changes are produced in her body," may need some substantiation.

Unlike most of these books, it places emphasis on the value of using the fertile days when pregnancy is especially desired.

Calendars are placed in the back for personal use and many pages are left blank for the woman's personal and intimate notes.

The busy practitioner seeking a practical book for every day consultation on this method will find this book just what he needs. I believe the average woman will be wiser and safer to consult her physician and have him help her calculate her days of probability.

ABSTRACT

FLINN, FREDERICK B.—Some Clinical Observations on the Influence of certain Hygroscopic Agents in Cigarettes. Laryngoscope, 1935, XLV No. 2, 149-154.—Mulinos & Osborne (Proc. Soc. Exper. Biol. and Med. 32:241-245, 1934) using rabbits showed the edema caused by cigarettes using diethylene glycol as hygroscopic agent to be less than that from cigarettes using glycerine. Flinn reports a number of clinical observations. In cases showing congestion of some portion of the mucous membrane of upper respiratory tract as result of smoking glycerine treated cigarettes, on smoking cigarettes containing diethylene glycol, congestion disappeared in 62.3 per cent and considerable improvement noted in other 37.7 per cent. On returning to glycerine treated cigarettes 80 per cent showed a return to the congested condition of the pharynx and larynx. Coughs and irritation of the tongue showed analogous results.

"Summary: The combustion products of glycerine when it is used as a hygroscopic agent in cigarettes will under certain conditions cause an irritation of the throat. The combustion products of dietbylene glycol cause only a slight irritation, if any, of the throat. There is some evidence that they may be beneficial where irritation is present."

ADVERTISERS IN THIS ISSUE

Akron Surgical House, Inc., Indianapolis ... v
American Can Co., New York ... xxxiii
Appalachian Hall, Asheville, N. C. ... xii
Approved Clinical Pathologists ... xxxi
Baxter One-Stop, Indianapolis ... xxxi
Chesterfield Cigarettes ... xv
Coca-Cola ... xxxii
Cocomalt—R. B. Davis Co. ... xx
Cook County Graduate School of Medicine, Chicago ... xiii
Commercial Announcements ... xxxii
Corn Products Refining Co., New York ... xvi
Craig's Candies, Indianapolis ... xvii
Curdolac Food Company, Waukesha, Wisc. ... xii
Eli Lilly and Company, Indianapolis ... xviii
Gausepohl, E. J., Co., Indianapolis ... xix
Hord's Sanitarium, Anchorage, Kentucky ... xiii
Hynson, Westcott and Dunning, Inc., Baltimore ... v
Indiana University School of Medicine, Indianapolis ... xxxiv
Keene Pharmacy, Indianapolis ... xxxii
Kenilworth Sanitarium ... xiv
Larsen co., Green Bay, Wisc ... xix
Louisville Neuropathic Sanat., Louisville, Ky. ... xiv
McMillen Sanitarium, Columbus, Ohio ... xii
Mead Johnson and Company, Evansville ... iii
Medical Protective Company, Wheaton, Illinois ... xix
Milwaukee Sanitarium, Wauwatosa, Wisconsin ... xxxiv
Morris Plan, Indianapolis ... vii
Neuronhurst—Fletcher's Sanatarium, Indianapolis xvii
Norways—Sterne Memorial Hospital, Indianapolis xxxii
Oconomowoc Health Resort, Oconomowoc, Wisconsin ... ix
Oxford Retreat, Oxford, Ohio ... xiv
Parke, Davis and Company, Detroit ... ii
Petrolagar Laboratories, Chicago ... xxxii
Philip Morris and Co., New York ... v
Physicians' Directory ... xxii
Pitman-Moore Company, Indianapolis ... ix
Plymouth Sanitarium, Plymouth, Ind. ... xii
Ritter, F. A., Detroit ... xxxi
Simpson Institute of Radium Therapy, Chicago ... xi
Squibb, E. R. and Sons, New York ... iv
Stokes Hospital, Louisville, Kentucky ... xi
Waukesha Springs Sanitarium, Waukesha, Wisc. ... xiv
White-Haines Optical Company, Indianapolis ... xiii
Wilson's Milk, Indianapolis ... xvii

THESE ADVERTISERS SUPPORT YOUR JOURNAL. GIVE THEM YOUR PATRONAGE IN RETURN.

PHYSICIANS' DIRECTORY

SURGERY AND GYNECOLOGY

EDMUND D. CLARK, M.D.
Practice Limited to
Abdominal and General
Surgery
712 Hume Mansur Bldg. Indianapolis, Indiana

Hours: 11 to 1, or by appointment Phone: Hemlock 2226
WILLIAM N. WISHARD, M.D.
HOMER G. HAMER, M.D.
HENRY O. MERTZ, M.D.
WILLIAM N. WISHARD Jr., M.D.
Genito-Urinary Diseases
1711 N. Capitol Avenue Indianapolis, Indiana

Hours: 12 to 2, and by appointment
P. E. McCOWN, M.D.
Diseases and Surgery of the
Genito-Urinary Organs
521 Hume Mansur Bldg. Indianapolis, Indiana

Office Hours: 11 to 12, 3 to 5 and by appointment
PHONE Ri. 7926
R. O. McALEXANDER, M.D.
Surgery and Diseases
of Women
740 Bankers Trust Bldg. Indianapolis, Indiana

HOURS: 12 to 4,
and by appointment
PHONE:
Office Lincoln 3125
FRANK C. WALKER, M.D.
Gynecology and Abdominal
Surgery
Hume Mansur Bldg. Indianapolis, Indiana

JOHN H. EBERWEIN, M.D.
Practice Limited to
Abdominal and General
Surgery
720 Hume Mansur Bldg. Indianapolis, Indiana

JEWETT V. REED, M.D.
General and Abdominal
Surgery
820 Chamber of Commerce Bldg.
Indianapolis, Indiana

PHONES: Office, Riley 1714; Drs. Exch., Cherry 2031; Res., Wash. 2321
C. O. McCORMICK, M.D.
Practice Limited to
Obstetrics and Gynecology
504 Medical Arts Bldg. Indianapolis, Indiana

NORMAN E. JOBES, M.D.
Surgeon
Traction Terminal Bldg. Indianapolis, Indiana

Hours: 2 to 3 daily except Wednesday and Sunday
GOETHE LINK, M.D.
Practice Limited to
Surgery
608 Indiana Pythian Bldg. Indianapolis, Indiana

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

OFFICE OF PUBLICATION: 1021 Hume Mansur Bldg., INDIANAPOLIS, INDIANA

VOLUME 28 JULY, 1935 No. 7

ORIGINAL ARTICLES

EMERGENCY SURGICAL TREATMENT*

N. K. FORSTER, M. D.

HAMMOND

Emergency surgical treatment largely resolves itself into a consideration of that field of practice known as traumatic surgery, for it is under this specialty that by far the largest number of cases requiring emergency surgery will fall. It is of interest to view in retrospect the gradual development of this branch of surgery; the early medical men engaged in crude but fairly effective efforts to care for those injured in tribal warfare; the evolution to slightly more refined methods of war surgery; the peace time occupational traumas inherent to the development of industry; and now the transportation era with the development of high speed motor vehicles, and the desire to "go places and do things," with an ever increasing toll of limb and life.

From the earliest of times the care of the injured has been an imminent problem, and yet traumatic surgery, as a specialty, has only in recent years received the recognition it deserves. Since it has always been intimately connected with general surgery, its representation as a distinct specialty has been through a gradual evolution associated with the advance of industry, and the progress of civilization. At the present time it reserves for itself the management of the injured without qualification as to the source or site of the injury. That this is essential to the proper care of the individual, as well as to a lessening of physical and economic loss, is apparent when we consider that not only is surgical experience necessary, but, in the larger centers, knowledge of occupational diseases, industrial hazards, workmen's compensation laws, insurance angles, medico-legal problems, and, above all, a set-up competent to care for emergency cases day or night with a minimum of delay. The emergencies of general surgery, such as the acute abdominal conditions, require no more high grade immediate type of service than does the acute traumatic injury, if the best results are to be obtained. The large number of suits for malpractice incident to poor results or malfunction resulting from injuries bear testimony to the great need for careful, thorough and painstaking immediate care of the victims of accidents. And in order to render this type of management, it is essential that our hospitals be completely equipped to furnish the necessary types of apparatus and instruments for this kind of work. It is imperative that a splint room be provided under competent supervision, containing all of the usual and some of the unusual articles suitable for the proper handling and immobilization of fractures. Nothing is more disconcerting than to bring a seriously injured patient to a hospital for emergency care, and then be forced to hunt all over the place for a certain type of equipment, and finally have to resort to some makeshift substitute. Not only that, but we must thoroughly familiarize ourselves with the proper procedures in the care of the injured, in order to do justice to the patient. Halfway measures may result in a seriously handicapping disability to the patient, and perhaps the very uncomfortable position of defendant in a lawsuit for ourselves. Therefore, it is well to recognize and remember certain general principles if we are to do any amount of traumatic or emergency surgery.

The first of these is the immediate effect of trauma. Unlike diseases or infections or other pathological processes, there is no incubation period or time element present which allows for a general building up of bodily resistance against the condition. The accident occurs and the trauma is present in its completely developed state. The reaction is instant. There may be subsequent complications but the initial trauma immediately affects the lesion.

* Presented before the Indiana State Medical Association Fourth Graduate Educational Meeting and the First District Medical Society at Evansville, May 8, 1935.

Second, because of this immediate effect, the treatment must be applied immediately if the best results are to be secured. The emergency exists at once and requires emergency management. When this is recognized, the trauma alone and uncomplicated is cared for. When treatment is delayed the difficulties are multiplied, the dangers of infection are increased, the disability of the patient is extended, and the end results are inferior. We know, for instance, that if a ruptured appendix or a ruptured gastric ulcer is given proper surgical care within six hours of the onset, the chances of cure are excellent, and that the longer this treatment is delayed the less apt we are to have a successful outcome. There is one notable exception to this provision of immediate treatment, and that concerns the general condition of the patient. It should be a cardinal principle that any patient who is in shock should be treated first for the shock before resorting to any manipulative or surgical measures. Unless this is observed our efforts and anxiety to render immediate treatment may be in vain. In such conditions the shock is the emergency condition, and as such demands the immediate care. When this is successfully combated, then the necessary steps for the management of the trauma itself should be instituted.

Third, the care of traumatic cases does not as a rule cease once the emergency surgical measures have been carried out. Practically always they must be followed up by painstaking after-care in order to secure a satisfactory result. In general surgical cases the operation itself constitutes the chief method of management as a rule. The gall bladder is removed, the appendix excised, the ruptured gastric ulcer sutured; and after a short convalescence the patient is discharged as cured. In traumatic cases, however, the initial management is usually but the first step in the case. A careful follow-up, by means of the utilization of all the measures at our command, must be put into play so that a good functional end result may be secured. This includes the use of various physical therapy measures, massage, active and passive motion, exercises, etc., and the manner in which they are employed may often mean the difference between a good and bad result.

Fourth, the danger of infection in traumatized areas is always a grave consideration. Not only has tissue resistance been greatly impaired by the trauma, but circulation is always interfered with, and the injured areas furnish an ideal culture media for bacteria. Consequently more than ordinary care must be exercised to prevent the occurrence of infection, and in spite of this the percentage of infections will be relatively high.

Fifth, the proper handling of traumatic cases requires a wide and varied knowledge, for not only will the lesions vary from simple lacerations, abrasions, sprains and contusions, to complex and complicated cranial, thoracic, abdominal and skeletal problems, but the victim may come from any rank, sex, age, or occupation, and the injuries themselves may vary greatly according to the traumatizing agent. Usually, in our general surgical practice, we have time for a searching history, a thorough physical examination and the mapping out of a definite plan of procedure. Not so in the exigencies of emergency surgery, for here the proper treatment must be administered at once if we mean to save life and prevent permanent disabilities. Consequently, experience and knowledge are factors of extreme importance in the attainment of success in this field.

Sixth, the legal aspects of emergency surgical cases practically always enter into the consideration of the case. Medico-legal, compensation or insurance factors subject the patient to the influences of others, and frequently to the detriment of the end result and the reputation of the physician. The question of malingering all too frequently creeps in to prove a most disturbing factor in the relationship of the patient and the doctor, and between the doctor and the insurance company or court of law. Here again the contrast between general surgical practice and emergency or traumatic surgery is all too evident, because in the former there are seldom any outside factors to be encountered. Moreover, there are other elements in our own ranks that are disturbing, and for which an adequate solution has not been secured. How often in the arbitration or settlement of a question of disability before a court have we witnessed one medical opinion given to the effect that a permanent disability of 80 per cent exists, and an opposing medical estimate of only 20 per cent. Such a disparity of opinions seldom argues for the honesty of one or the other side in the eyes of the court. The placing of the traumatic surgeon in the position where he must deal not only with the patient but also with a third, fourth, or fifth party is not always an enviable one. His course of action is bound to be subjected to criticism from one side or the other, and the influence of his decision may often be far-reaching and to his detriment. In spite of this an honest, fair, and impartial opinion can be the only method of choice.

Seventh, the end results of the management of the traumatized victim are too often all-apparent. The disfiguring scar, the obvious deformity or limp, the functional defect, are all glaring exhibits. They emphasize again the painstaking care which must be exercised in reducing them to a minimum. It is an old satisfying custom, particularly, may I say it, among the ladies, to proudly regale their friends and even casual listeners with the horrors of their operation. But it is seldom that one hears any voluminous recitals with reference to a crippling trauma. One has been a voluntary experience followed usually by a return to health, and for which the evidence is not usually visible. The other has been an involuntary deforming accident, followed by obvious disability and a sense of bitterness and inferiority in the mind of the victim.

Eighth, because of all these points which have been brought out in contrast, the traumatic case is always a fertile breeder of a malpractice suit. This is particularly true of those cases where the injury is likely to result in some deformity or malfunction. It is also too frequently true of those cases where we have expended our best efforts to secure a good result, and for which we have received little or no compensation.

In the management of emergency surgical cases over a period of time, it becomes evident that the large majority of these traumas will group themselves under the headings of contusions, wounds, burns, fractures, and dislocations. Certain guiding principles are necessary if the best results are to be secured in their treatment.

1. Early treatment is essential. The old procedure of waiting until the swelling has subsided, in the case of fractures, before institutiong treatment, is a principle of the dark ages.

2. Immobilization followed by early motion is necessary.

3. Infrequent dressings to limit the danger of secondary infection should be practiced.

4. Prompt intervention with free drainage, when infection is manifest, should be followed.

5. Open operations in fractures and dislocations should be resorted to only when closed methods have definitely failed.

6. The use of anesthetics should be employed wherever possible; local infiltration whenever feasible, or inhalation anesthesia if indicated. Spinal anesthesia may well be reserved for certain particular cases only. You will make a friend of your patient when some form of anesthesia is used, and many an enemy where it is not employed, besides adding to the shock of the trauma. In general, the management of a traumatized case when first seen should be governed by the following guiding principles:

1. Control the hemorrhage.
2. Allay mental excitement.
3. Relieve the pain.
4. Preserve body heat.
5. Stimulate circulation.
6. Conserve body fluids.
7. Intervene surgically when shock is combated.

In the emergency treatment of wounds, certain requirements present themselves. Every traumatic wound must be considered an infected one, and the immediate problem is to render it as sterile as possible. To accomplish this we have two methods of choice: By mechanical means we can cleanse the tissues of gross dirt through mopping or gently scrubbing with tincture of green soap, and in addition secure an effective chemical sterilization. Oily materials may be satisfactorily removed with ether. Debridement is indicated in the presence of lacerated and dirty tissues, and is an aid in securing clean-cut surfaces for better apposition and primary healing, as well as reducing the likelihood of infection. The use of various multicolored chemical antiseptics has become a fetish in the minds of the laity, as well as many physicians, and I think we all realize that to depend on them alone for the prevention of infection is a false optimism. To use a chemical strong enough to destroy organisms in the presence of traumatized tissues is to add insult to injury. In such cases, where soap and water are not available, the old reliable tincture of iodine is the antiseptic of choice, and, in my opinion, it is the most effective one.

Following thorough cleansing, absolute hemostasis should be secured. For this purpose, fine, plain, catgut ligatures not larger, as a general rule, than a size "0" will suffice. The ligatures should encircle the bleeding point only, and not a mass of surrounding tissue which later undergoes pressure necrosis and adds to the danger of infection. Hemostasis should be complete, not only to secure good healing, but also because the accumulation of blood in the tissues provides an ideal culture media for bacteria.

Suturing is then accomplished, using as fine a material as practicable, and limiting the number to those just sufficient to adequately approximate the edges. Where the tissues have been greatly contused or lacerated, it is good practice to carry out delayed primary suture; that is, to place the sutures but not to tie them until after two or three days. In this way many infections are prevented.

It is, of course, a cardinal principle in dealing with traumatized wounds to drain. Ordinarily the drains should be of soft rubber tissue, and in most instances small, and these may be removed the second or third day. For filling in large spaces or for controlling hemorrhage, oil-soaked gauze may be effectively employed.

Where there is a question of soil contamination, the prophylactic administration of combined tetanus and gas gangrene antitoxin is of the utmost importance and should be a universal practice. Where a simple punctured wound has resulted from trauma, the use of tetanus antitoxin alone is usually sufficient.

Healing is greatly hastened and the period of disability shortened if the injured part is put at rest, and elevation of the affected member aids the circulation.

For infected wounds, the early removal of sutures and the institution of free drainage are essential. Resolution is then hastened by the application of hot, wet boric or magnesium sulphate dressings.

Summarizing the guiding principles in the management of wounds we have:

1. Sterilization.
2. Control of bleeding.
3. Suture.
4. Drainage.
5. Administration of antitoxin.
6. Rest and elevation.
7. After treatment and care of complications.

In the management of burns, one should look into the future, and be guided by the physical findings. The general early treatment is of the greatest importance, because those cases of severe burns die quickly from shock. Pain, which is always of an agonizing character, should be promptly relieved by a sufficient dose of morphine and the spraying of the injured part with a one per cent solution of novocain. It is needless to say that the treatments for burns are legion; perhaps the best one to use is the one with which we have had the best results. For superficial burns, I employ a two per cent ichthyol in zinc oxide ointment, and have secured excellent results in its use. For the more extensive and deeper burns, the use of a freshly prepared five per cent tannic acid spray, coupled with an electric light heat cradle, and without dressings, is the method of choice. The spray is applied at fifteen-minute intervals until complete tanning is secured. Skin grafts follow the sloughing of the necrotic area. Where the burns involve joint surfaces it is essential to prevent contractures by proper splinting or enforced postures. The general principles governing the treatment of burns are:

1. Relieve the pain.
2. Treat or prevent shock.
3. Care for the injured tissues.
4. Promote excretions.
5. Stimulate circulation.
6. Prevent contractures.

In the handling of fractures and dislocations many of the principles already reviewed are again applicable. In the case of simple dislocations, by far the method of choice is manipulative reduction, under local anesthesia in the case of minor dislocations, and under general anesthesia in the case of major ones. Early treatment is again essential in order to secure prompt healing and complete function. In fracture dislocations, the dislocation is reduced and the case then treated as a fracture. Compound injuries should be converted into simple ones by applying the principles applicable to wounds in general. In the emergency care of fractures the element of time must again be emphasized. Muscle spasm, inflammation, hemorrhage and swelling increase the longer reduction is delayed, and the difficulties of reduction multiply rapidly with dilatory handling. For transportation or provisional use a Thomas or Jones traction splint is indispensable, and of great service in aiding the correction of displacement by immediate traction. The method of choice of handling any particular fracture will, of course, vary with the nature and location of the fracture, and the individual experience of the surgeon. If satisfactory reduction cannot be secured and maintained within a week by the usual closed methods, then open operation should be done. This will be indicated frequently in cases of comminuted spiral factures, where soft tissues are interposed between fragments, certain types of fracture dislocations, and particularly in fractures of the patella and displacements of the olecranon and condyles. Plaster of paris moulded splints are preferred to the old type of circular bandages, chiefly because of the danger of impairment of circulation and ischemic paralysis. However, the method of immobilization will again depend upon the part affected, and the individual preference of the operator. In any event, early motion and return to function is necessary for a good end result. The ambulatory management of fractures after the methods of Boehler is becoming more and more widely adopted. It is a matter of course, not only for the welfare of the patient, but for our own protection, that x-ray examinations be made before and after reduction, and at such intervals as may be indicated from the progress of the case.

In general, then, a summary of the principles applicable in these types of injuries are:

1. Relieve pain, and prevent further injury by a suitable temporary traction splint.
2. Institute early treatment and reduction.
3. Employ anesthesia of suitable type.
4. Immobilize until the reaction has subsided and repair is established.
5. Combat prolonged disability and inferior end results by early motion and massage.
6. X-ray before and after reduction and at necessary intervals thereafter.

In conclusion, then, we have attempted to review in summary some of the important general considerations applying to the majority of those cases which come under the management of emergency surgical care. Not always can they be successfully applied, and not always will the results be perfect when they can, but in any case it is fundamental to consider the welfare of the patient as an individual, rather than as a case with a definite local trauma. While a live patient with a disability may speak volumes, a fatality with a perfect wound is a whole library.

137 Rimbach Avenue.

Make Your
Plans Now
to go to
GARY
October 8, 9, 10

MORAX-AXENFELD CONJUNCTIVITIS*

ROBERT D. SMITH, M. D.
CRAWFORDSVILLE†

The first description of the causative organism in this disease was published by Morax in 1896. One year later Axenfeld wrote about the same diplobacillus, which is commonly referred to as the Morax-Axenfeld bacillus or the diplobacillus of subacute conjunctivitis.

The early studies in this country were made by Dr. Harold Gifford, who emphasized the importance of this specific bacteria and reported corneal lesions from which pure cultures were obtained.

ETIOLOGY

This disease is very widespread and has been identified in all countries. Where serial studies of lowgrade conjunctivitis cases have been made, in various clinics in the United States and abroad, this diplobacillus has been identified in a vast majority of cases. In fact, it ranks first in frequency, except in a few cases where it is second only to the Koch-Weeks bacillus. It has been reported endemically and epidemically; however, in private practice, it is usually one or more members of a family who come for treatment, followed shortly by other members of the same family.

Its frequent presence in the normal conjunctiva and lacrimal sac is of interest where operations on the globe are being considered.

BACTERIOLOGY

The organism, as the name implies, occurs typically in pairs, and less frequently remains in short chain formations. They are non-motile and possess no flagella. Spores are not produced; encapsulated forms are disputed. No noteworthy toxin or enzyme is formed. The individual bacilli are medium sized, and the ends are rather square cut. They stain readily with ordinary aniline dyes, such as Wright's or methylene blue. The gram stain is negative. In office practice the microscopic preparation from the discharge, or better still, from the lid scrapings, can be made with little time or effort. Fortunately the only bacilli likely to be mistaken for diplobacilli are rare inhabitants of the conjunctival sac. Petit's organism can only be differentiated by cultural methods. Both liquefy blood serum and are gram negative. However, only the Petit organism grows on agar or gelatin, and for practical purposes cultural methods are seldom necessary for diagnosis.

At times, a pure culture may be obtained from the eye, but a mixed infection is usually present and only after repeated transplanting can the pure growth be obtained. The growth must be aerobic at all times. The ability of this bacillus to withstand the effects of drying is rather remarkable, and is an important factor in transmission. Failure has attended all attempts to reproduce, experimentally, the infection in ordinary laboratory animals. To man, it is distinctly pathogenic.

SYMPTOMS

As a rule the subjective symptoms are similar to those of any other type of conjunctivitis of the same degree. However, there are one or two symptoms that should be emphasized.

Headache often accompanies the infection and usually disappears when the conjunctivitis is relieved. It will often be found in patients who are not easily disturbed by pain. Frequently it is worse in the evening after prolonged use of the eyes.

Patients with complaints that are often ascribed to eye strain or asthenopia may be repeatedly refracted without relief, and are relieved only after correct diagnosis has been made and specific treatment instituted.

VARIETIES

While the condition may vary from a mild hyperemia to a severe muco-purulent conjunctivitis, there are as a rule three fairly constant types.

The signs of a subacute or chronic blepharoconjunctivitis are perhaps the most commonly seen. This variety may have had an acute onset, but is more often insidious in character, with a tedious course, beginning as a mild conjunctivitis in one eye, soon to involve both eyes. Redness of the lid margins, with slight induration and scaling, particularly of the commissural angles, and congestion of the neighboring conjunctiva, is characteristic. The secretion is scanty and has a tendency to adhere to the lid margins, especially the inner half. This constant moistening leads to excoriations, and together with the exfoliating epithelium, adherent masses are formed upon the inflamed surfaces and through the lashes.

The acute variety is less frequently observed and may have no unusual clinical signs, unless an accompanying blepharitis is present. During this stage the diplobacillus is commonly present in the nasal secretions.

A very chronic variety with symptoms greatly predominating over the signs is very common. The constant eye irritation, often complicated with headaches, produces an irritable patient, who not infrequently goes from place to place seeking relief from eye symptoms or improper glasses or both.

COMPLICATIONS

Superficial corneal infiltrations and deep ulcers are rather rare occurrences. Association with other forms of conjunctival and corneal disease is very common, as is also its presence in dacryocystitis. It is a frequent cause of meibomianitis. Iritis without corneal lesion has been reported.

PROGNOSIS

The duration of this condition is from six weeks to six months, but improper treatment may prolong

* Presented before the Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association, Indianapolis session, October, 1934.

†Dr. Smith is now stationed at Carlisle, Pa., with the U. S. Army Medical Service School.

this estimate many times. Early recognition and specific treatment will terminate the condition.

DIAGNOSIS

Diagnosis is usually made from a history of prolonged or recurrent infections; the symptoms of conjunctivitis plus pain or eye strain; the signs of a chronic productive blepharoconjunctivitis; with direct smears from the secretion or, better still, the scrapings from the involved area for the diplobacillus and the reaction of the infection to treatment.

PROPHYLAXIS

Prophylaxis would involve the early diagnosis and isolation or instruction on hygiene of the eye in active cases.

For active treatment, the principles to be followed are: rest of the eyes, maintenance of drainage, promoting of immunity, and use of zinc salts.

The patient should be removed from the influence of dust, smoke, and wind. For photophobia, smoked glasses are necessary. A careful examination of the lids and conjunctiva should be made for the presence of misplaced cilia or foreign bodies.

Restriction of the use of the eye is helpful in all cases.

Drainage is facilitated by keeping the eyes clean, the margins free from crusts, and strict prohibition of eye patches or prolonged use of thermal appliances. The lids are freed from crusts by the gentle use of 50 per cent hydrogen peroxide. In children, the best procedure is to place cotton, in the form of an eye pad, well soaked in the solution, closely in contact with the lids for about five minutes, and then wipe off the softened masses, after which the area is dried. Washing the lids with water and castile soap is a valuable and necessary procedure in some cases.

To promote resolution, locally, dry heat should be used to the point of tolerance; that is, so that passive congestion is avoided. Ordinarily, applications for twenty to thirty minutes in every two hours is sufficient. In acute cases, with intense hyperemia, the local picture may be favored with the use of cold until the stimulating effect of heat is found necessary.

General immunity, indicated in the chronic cases, is promoted by the use of a foreign protein. Whole milk that has been boiled four minutes by the clock, given intramuscularly, in doses of 1-2 cc. for infants, to 8-10 cc. for adults, will be very helpful. It may be repeated in ascending amounts as the case demands. After the acute symptoms have subsided, massage of the lids to empty the meibomian glands aids in restoring the normal secretions. Occasionally it is an absolute necessity before the condition can be arrested.

Zinc may be used topically as a concentrated solution, two per cent; or as an ointment, one-half per cent; wash or weaker solution for instillation, two-tenths of one per cent.

Zinc sulphate is the original drug used and is commonly supplied for home use in strength of one grain to one ounce, to be instilled three times daily. In sensitive patients, novocain, two grains, and adrenalin chloride, one dram, may be added. The chloride must be used in half strength as compared to the sulphate, as it is more active and irritating. For irrigation in purulent cases, a very weak solution, one grain to six ounces, of the sulphate is ordered. The patient should also use a lubricant on the lid margins at bedtime each night to prevent the lids from sticking and thereby aid in drainange. A drop of mineral oil or olive oil, or the zinc sulphate ointment will serve the purpose.

The office treatment consists of topical applications. After a few drops of a local anesthetic solution, the lids are everted and a two per cent zinc sulphate solution is either dropped on the lids or applied with an applicator, and after a few seconds, the lids are irrigated with a weak zinc sulphate solution. As this procedure is rather irritating, most patients will appreciate the use of a few more drops of the anesthetic solution or the instillation of an ointment containing an anesthetic with a little epinephrine.

The topical application should be made two or three times weekly and continued for several weeks. Because of the tendency for recurrence, use of the drops and ointment at home must be continued for several weeks after all clinical signs are gone.

In cases complicated by corneal disease, applications and irrigations are very beneficial.

CONCLUSIONS

The diplobacillus infection of the conjunctiva is a very common and widespread infection.

The symptoms of headache and eyestrain are often mistaken for a refractive error.

Diagnosis with smears or scrapings from the eyes is easily made.

Treatment with zinc salts is specific.

DISCUSSION

C. A. ROBISON, M. D. (Frankfort): I think this subject has been well covered. Modern textbooks usually give it about two paragraphs. In many of these cases it is a mixed infection. This is not a self-limiting disease. Therefore, it should not get us into difficulty, because we know that when the patients begin to get better, they fail to put the solution in at home until they get worse again, then return. One case I saw, from Middletown, New York, at the Fuchs clinic; a doctor had the disease and had been trying to cure it for some time. Young Fuchs simply everted the lids and painted them with two per cent silver nitrate, and the doctor, after leaving the clinic in about two hours' time said that it felt much better. Paint it two or three times per week along with zinc solution treatments. I never have used peroxide in softening crusts. I always have used warm boric acid solution, but I see no objection to the peroxide. Many

cases will clear up with silver salts. Of course, zinc is specific.

DR. SMITH (closing): I would like to add that I have seen both silver and zinc used, and having used both, I prefer zinc, for it is less irritating. The end results are the same—cure. Patients will prefer the zinc to silver, as there is less discomfort following the treatments.

THE INTRA-CAPSULAR EXTRACTION OF SENILE CATARACT*

C. P. CLARK, M. D.
INDIANAPOLIS

The technic for extraction of senile cataract has undergone many changes and improvements since the time of Daviel. In ancient times, and especially in oriental countries, cataract was treated by displacement of the lens from its normal position within the eye. The operation of displacement, or couchment, continues to be the operation of choice in oriental countries by the native surgeons, or itinerant couchers.

During the past two centuries the white race has made great advances in medicine and surgery. The technique for removal of senile cataract has likewise advanced, and the operation of couchment has been relegated to the distant past.

Daviel, in 1745, was the first surgeon to remove the lens from the eye rather than to displace it from its normal position. During the succeeding century many advances in technique were made by various surgeons. Von Graefe designed the cataract knife which bears his name and which is in common use today. The different steps in technique which are now grouped together as the classical operation of extra-capsular extraction were gradually brought together. This operation consists in an incision upward in the limbus corneae, with or without an iridectomy, an opening in the anterior lens capsule is made and the nucleus with as much of the cortical material as possible is then expressed from the eye.

Many modifications of the technique have been introduced during the succeeding years. It would require too much space and time to enumerate the various changes that are advocated and performed by different surgeons. If one were to visit any instrument dealer he would discover a multitude of instruments with some surgeon's name attached that was developed by that surgeon to facilitate some maneuver in the extraction of cataract. If one refers to one of the larger works which deals with the operation for cataract he will likewise discover what seems to be an endless number of descriptions of some modification in the technique of the operation.

METHODS OF OPERATION

The goal of all these surgeons has been to remove the crystalline lens from the eye with the maximum degree of safety for the patient and with the fewest possible number of post-operative complications. The latter are often brought about by portions of the lens and capsule that are permitted to remain inside of the eye. The ideal cataract operation is one in which the lens is removed from the eye in the capsule with a minimum of operative trauma to the eye.

There are three general methods by which this operative objective is approached. The surgeons, whose names are attached to the respective methods, were not the first ones to remove the lens in the capsule. They perfected the technique and popularized the respective operation.

The first one is that of Smith, or as it has been commonly called, the Smith-Indian operation. Col. Smith of the British Indian Medical Service perfected the technique.

He performed the operation upon thousands of people in India. Curiously enough, Col. Smith was a general surgeon and it became his duty to operate upon many people in India for cataract. He became interested in the subject of intra-capsular cataract extraction in order to avoid the post-operative problems and complications which arose from portions of the lens that were permitted to remain within the eye after the extra-capsular operation. The operation as devised and done by Col. Smith necessitates the application of considerable pressure upon the eye. Due to the amount of pressure which must be applied to many eyes in order to rupture the suspensory ligament and deliver the lens, damage often occurred to other intra-ocular structures. The Smith operation has not been favorably received and is not employed today by very many surgeons. One thing that the Smith operation did accomplish was that it increased interest in the subject of intra-capsular cataract extraction. It gave an impetus to the study of ways and means to accomplish this end.

The second method is that of Barraquer, or the eresiphake. This consists in the use of a rather elaborate and delicate machine with a cup-shaped instrument, the eresiphake, which is applied to the anterior surface of the lens. The instrument grasps and holds the lens by a vacuum pressure inside of the cup. The suspensory ligament is ruptured by vibratory oscillations of the instrument. The lens is then rotated on the horizontal axis and delivered from the eye. The Barraquer instrument and technique is an excellent method for the intra-capsular removal of cataract when limited to the hands of Barraquer. It is not an operation that should be undertaken by the majority of ophthalmologists who have the privilege of operating upon comparatively few patients each year. It must be remembered that Barraquer operated upon a large number of people before he made any report or published any statistics, and that his early reports did not include his first thousand cases.

The third method of intra-capsular cataract removal requires the use of smooth forceps. With

* Presented before the Indiana Academy of Ophthalmology and Otolaryngology at Richmond, December 13, 1934.

these forceps, of which many different types are available, the surgeon endeavors to grasp the anterior lens capsule and ruptures the suspensory ligament opposite the lower pole of the lens. The lens is then delivered from the eye by one of several ways. It may be drawn out of the eye by gentle traction with the forceps. The lens may be delivered by external pressure alone similar to the Smith technique after the suspensory ligament has been ruptured. Or, the lens may be delivered by a combination of external pressure and gentle traction with the capsule forceps.

The use of smooth capsule forceps to rupture the suspensory ligament and to aid in delivery of the lens is known as the Stanculeanu-Knapp-Török-Elschnig operation. The efforts of these four men perfected and popularized this method of intra-capsular operation for cataract. It is the most popular intra-capsular operation and undoubtedly the best one for the average ophthalmic surgeon.

The three methods spoken of, namely, the Smith-Indian, Barraquer, and Stanculeanu-Knapp-Török-Elschnig have one step which is common to all three, and that is that the lens should be rotated upon its horizontal axis during delivery. The lower edge emerges first from the eye. The lens is tumbled during delivery.

The intra-capsular operation is not suitable for several types of cataract. It is not suitable for congenital cataract in young persons, for traumatic cataracts, subluxated lenses, morgagnian and intumescent cataract, and in those persons who have small corneae.

The intra-capsular operation with forceps is suitable in myopic eyes, for brown or black lenses and for incipient and mature subscapsular cortical cataract. The operation should be performed as soon as the patient is unable to follow the usual routine. Monocular cataract should be removed before the lens becomes hypermature. It is the writer's preference to operate as soon as vision is reduced to an uncomfortable level and while the cataract is immature.

A preliminary general examination is made with attention given to diseases which might cause complications during the performance of the operation or during convalescence. If any condition is discovered which might jeopardize the success of the operation, this condition must be corrected. Otherwise, it is best to postpone the operation.

Conditions such as bronchitis, bronchiectasis, asthma, elevated blood pressure, cardiac disease, nephritis, focal infection, especially apical abscesses of teeth, diabetes, hemorrhoids, prostatic hypertrophy, curvature of the spine, and chronic disease of the gall bladder may have an adverse effect upon the post-operative course.

The ocular history should investigate such subjects as the following: The character of the vision of each eye previous to the onset of cataract; the state of the refraction which existed, particularly of evidence of myopia; ocular diseases; ocular injury; strabismus; the time of onset of cataract in each eye and the rate of progress of the same.

The ocular examination should be complete. Investigation of the following subjects should be emphasized: Testing of the light perception and projection if the cataract has become so opaque that an examination of the fundus cannot be made. Determination of the ocular tension with the tonometer. The position of the eyeball in the orbit should be noted, particularly a prominent eyeball, or the presence of any anatomical peculiarity that may disturb the satisfactory conduct of the operation. The conjunctiva should be carefully examined. Chronic inflammatory conditions should be corrected by appropriate treatment. It has not been the writer's custom to make cultures from the conjunctiva unless a low grade conjunctivitis persists, regardless of the treatment instituted. The lacrimal passages should be determined to be patent by irrigating the lower lacrimal duct with some neutral solution which should pass readily into the nose. Any peculiarity of the cornea should be noted, especially opacities, abnormal size and curvature. The apparent depth of the anterior chamber should be noted.

The remainder of the examination should be conducted with a binocular loupe and high illumination, preferably with a slit-lamp and corneal microscope if they are available. The condition of the iris and margin of the pupil should be carefully inspected. Then the pupil should be dilated with some mydriatic drug such as euphthalmine, and a careful examination made of the lens. The type and character of cataract should be determined as well as the position of the lens. The anterior lens capsule is inspected and the condition of this membrane is determined as well as possible, noting whether it is wrinkled, loose, or stretched. The location and character of the lenticular opacities are studied, and an idea may be had of the size of the lens nucleus. This may aid the surgeon to determine the size of the incision to be made.

The technique used by the writer consists of those procedures that have proved to be the safest and most successful in his hands.

Pre-operative preparation consists in abstinence from food for eight hours before the scheduled operation. The bowel is cleansed with soap suds enema two to three hours beforehand, and then a retention enema of fifty to seventy-five grains of sodium bromide is given thirty minutes before the time of operation. Morphine is never administered. The pupil is dilated with weak homatropine, euphthalmine, or 1:100 adrenalin. The cilia of the outer third of the upper lid are trimmed. The face is cleansed with neutral soap and water. The eye is freely irrigated with mercury oxycyanide solution, 1:10,000 strength.

Akinesia is obtained according to the technique of O'Brien. One to two cubic centimeters of two

TABLE 1

Patient	Age	Type	Delivery	Complication	Vision
1. Mr. W	72	Cortical	+	None	20/20
2. Mrs. B	66	Cortical	+−	None	20/20
3. Mary M	62	Toxic	+	None	20/50
4. Mr. R	56	Subcap. cortical	+	None	20/15
5. Mr. S	77	Cortical	+	Endophthalmitis	nil
6. Mr. S		Subcap. cortical	−	None	incomplete
7. Sid. S	65	Subcap. cortical	+	Hyphema-senile central choroiditis	20/70
8. Sid. S		Subcap. cortical	+	Central choroiditis	20/70
9. Mrs. R	60	Cortical	+	Diabetes late prolapse	20/40
10. Wil. A	81	Cortical	+	Iris prolapse	20/50
11. J	73	Subcap. cortical	+	None	20/20
12. J		Subcap. cortical	+	None	20/20
13. Th. McC	63	Cortical	+	Old detached retina	20/200
14. Mr. A	63	Subcap. cortical	+−	None	20/30
15. Mrs. E	65	Subcap. cortical	+	None	20/20
16. Mel. B	67	Toxic	+	Low grade uveitis	20/100
17. Mel. B		Toxic	+	Low grade uveitis	20/100
18. Mr. H	62	Subcap. cortical	+	None	20/20
19. F	65	Cortical	+	None	incomplete
20. Mr. A A	61	Subcap. cortical	+	None	20/20
21. Mr. A A		Subcap. cortical	+	Loss of vitreous	20/100
22. Mr. P	60	Cortical	+	None	20/30
23. Robt. M	47	Subcap. cortical	+	None	20/20
24. Mrs. P	60	Subcap. cortical	+	None	incomplete
25. Mr. N	62	Subcap. cortical	+	None	incomplete
26. Mr. K	73	Cortical	+	Dementia hyphema	incomplete
27. Mr. L	64	Subcap. cortical	+	Late iris prolapse	20/50
28. Mrs. M	67	Posterior cortical	+	None	20/20
29. Miss M. (Insane)	58	Subcap. cortical	+	None	20/30
30. Mrs. B	62	Cortical	+	None	20/40
31. Mr. B	68	Mature cortical	−	Diabetes late expulsive choroidal hemorrhage	
32. Mr. C	69	Mature cortical	+	Senile central choroiditis	20/50
33. Mr. S	57	Subcap. cortical	+	None	20/20
34. Mrs. C	62	Subcap. cortical	+	None	incomplete
35. Mr. T	63	Subcap. cortica	+	None	incomplete
36. Mr. R	71	Mature cortical	−	None	20/40

TABLE 1—Continued

Patient	Age	Type	Delivery	Complication	Vision
37. Mrs. A	78	Mature cortical	+	Loss of vitreous	20/50
38. Mrs. R	77	Mature cortical	−	Dementia	incomplete
39. Mrs. C	87	Mature cortical	+	Late expulsive choroidal hemorrhage	
40. Mr. P	67	Subcap. cortical	+	Corneae semi opaque before operation	20/40
41. H	57	Subcap. cortical	+−	None	20/20
42. H		Subcap cortical	+−	None	20/20
43. Mr. F	61	Subcap. cortical	−	None	20/40
44. Mr. M	66	Morgagnian	+	Iris incarceration	20/70
45. Mrs. P	63	Subcap. cortical	+	None	20/20
46. Mr. C	67	Subcap. cortical	−	None	20/70
47. Mr. C		Subcap. cortical	−	None	20/30
48. Mrs. C	63	Subcap. cortical	+	High myopia	20/70
49. Sister M B	67	Mature cortical	+−	None	20/15
50. Sister M B		Mature cortical	+−	None	20/15

TABLE 2

	Age	Sex	Eyes	Patients	Lens Delivery
Maximum	87	M 25	M 31	42	+37
Minimum	47	F 17	F 19		± 6
Average	67.9				− 7

TABLE 3

	+	+−	−
20/20	11	5	
20/30	2	1	1
20/40	3		2
20/50	5		
20/70	4		1
20/100	3		
20/200	1		
Incomplete	6		2
Failure	2		1

per cent procaine hydrochloride is injected deep into the tissue over the condyloid process of the mandible. Anesthesia is obtained by instillations of a solution composed of ten per cent cocaine in equal parts of adrenalin 1-1,000 and three per cent

ephedrine hydrochloride. A retrobulbar injection of 0.2 to 0.3 cubic centimeters of two per cent procaine hydrochloride is made. A few minims of the same solution is injected beneath the conjunctiva of the upper and lower cul-de-sac, and also above the upper pole of the cornea.

A light spring speculum is employed until after the incision is made, when it is then replaced by lid elevators in the hands of an assistant. A bridle suture is placed under the tendon of the superior rectus muscle in restless patients.

The writer is an enthusiastic advocate of the use of sutures to close the wound in all cataract operations. A Liegard suture is put in place before the incision is made. Two or more additional conjunctival sutures are inserted at the close of the operation.

After the section of the cornea is made with a good sized conjunctival flap some blood may collect in the anterior chamber. This is removed by irrigating the anterior chamber with warm normal saline solution.

The surgeon may next elect to perform the incision of the iris, either as a complete old style broad iridectomy, a peripheral iridectomy, or a simple iridotomy. There are many advocates of the different procedures. There are times when one type of iris incision is better than the others, and certainly a complete iridectomy is not necessary for all patients. A broad iridectomy is indicated if the iris has a tendency to prolapse. Recently the writer has adopted the use of a triple peripheral iridectomy instead of the other forms of iridectomy. One peripheral iridectomy is performed at ten, a second at twelve, and the third one at two o'clock on the dial. This seems to have all of the advantages of the intact pupil with a wide drainage area at the base of the iris. In the few instances where this triple iridectomy has been used there have been no iris complications.

The anterior lens capsule is grasped with the smooth capsule forceps and the suspensory ligament ruptured below the lens. Then, by a combination of external pressure upon the eyeball and gentle traction with the forceps the lens is tumbled upon its horizontal axis and delivered from the eye. The various sutures are tied, the iris replaced, and the operation terminated if there have been no complications. Eserin is instilled.

Fifty eyes were operated upon in forty-two patients. In the accompanying tables the eyes that were successfully delivered of intra-capsular cataracts, that is without rupture of the capsule, are labeled plus. Plus-minus indicated that the cataract was successfully delivered, but the capsule ruptured during the delivery of the lens. Minus indicates that the capsule ruptured during the delivery and some of the cortical substance was liberated in the eye.

COMPLICATIONS

The gravest complication encountered was expulsive choroidal hemorrhage for two patients. One extraction was intra-capsular without incident. The patient was aged eighty-seven years. The expulsive hemorrhage occurred on the third post-operative day. The other patient who suffered choroidal hemorrhage was a male aged sixty-eight years. The lens was delivered extra-capsularly. He had suffered from diabetes for several years. At the time preceding the operation all precautions were taken to control the diabetic condition. The systolic blood pressure of these patients did not exceed 135 m.m. Hg.

One patient had a late infection of the eyeball. There was no evidence of infection of the lips of the wound, but the vitreous became infected and the eye was lost.

Prolapse of the iris occurred three times. A peripheral iridotomy had been performed on these eyes.

Hyphema occurred twice. Each patient was restless and traumatized the operated eye.

Post-operative dementia occurred twice. Each patient became orientated and mentally clear when returned to his home.

Senile central choroiditis occurred three times with a corresponding reduction of central vision.

A partial detachment of the retina was found in one patient. This had existed before the cataract was removed, since the detached portion was pigmented. Central vision was 20/200.

Loss of vitreous occurred twice. Each cataract was delivered in the capsule. One patient was unruly and a bridle suture had not been placed under the superior rectus tendon. The accident occurred to the other patient due to improper anesthesia. The solution had not been renewed according to instructions. Vision was 20/50 and 20/100.

Two patients (three eyes) had chronic uveitis with secluded and occluded pupils. A complete iridectomy was made, and the iris was then freed from the lens with an iris spatula. Each lens was delivered intact in the capsule without any operative accident. A low grade uveitis persisted after the operation. Vision with lenses was 20/50, 20/100, and 20/100. In view of the fact that each of these patients had been helpless before the operation, and afterward was able to go about without assistance, the operative effort is justified.

It is the writer's opinion that the intra-capsular extraction of cataract gives the best results. There are fewer post-operative complications, since the capsule and lens substance is entirely removed from the eye. There are no masses of capsule remaining behind to occlude the pupil, and no cortical substance present that will produce a protein intoxication of the eye, endophthalmitis phacogenetica. When the iris sphincter has been left intact there is an active pupil with less dazzling than when a complete iridectomy has been made.

921 Hume Mansur Bldg.

OPERATING THE DIABETIC*

E. E. PADGETT, M. D.
INDIANAPOLIS

This subject is approached from the viewpoint of the surgeon, but I am fully convinced that there is no other single subject in the practice of medicine which requires such close cooperation between the man in medicine, the surgeon, and the laboratory worker. In fact, it has been my practice for a long time not to attempt any operation on a diabetic patient until I have had all the help obtainable from the two above-mentioned sources. The road is too full of the ruts of tragedy in the shape of coma, hemorrhage, hyper-glycemia, etc., for any man to travel it alone unless he is forced by circumstances to do so.

Joslin has stated that there are today many more diabetics than there were a decade ago, because insulin permits them to live longer, a fact with which we are constantly coming in contact, and the truthfulness of which no one questions. He further estimates that at least one-third of these at some time during the course of the discase need surgical treatment, and such measures are possible provided there is the "cooperation of accurate and interested technicians, faithful nurses and doctors conversant with diabetes."

For my own convenience, I have classed surgical diabetics under the following headings:

1. Emergencies.
2. Surgical conditions any one may have.
3. Gangrene due to diabetes.
4. Wounds, ulcers, etc.
5. Carbuncles.

The emergency in surgery we will always have with us. Delay in emergency surgery has never had any advantages, and the motto is still trite but true that in this business more than in any other "delay is dangerous." It therefore becomes the duty of the surgeon to handle these emergencies as usual, keeping in mind at all times that each and every one is fraught with additional dangers, if the subject for operation is a diabetic. This simply serves to emphasize again the importance of laboratory tests; no emergency is too great to permit delay long enough for a chemical urine test. There is nothing to hinder the diabetic from having curable infections such as spreading gangrene, appendicitis, pelvic abscess, ruptured ectopic pregnancies, etc., all of which call for prompt intervention, and in many of which delay is more than dangerous. In the presence of diabetes, preparation consists of a single subcutaneous injection of 20-30 units of insulin and the intravenous injection of 1,000 c.c. of normal saline solution.

Surgical conditions any one may have. There is no reason to doubt, and many reasons to believe, that the diabetic has a lowered resistance and hence is more prone to the ills of human flesh than those not so afflicted. Therefore each surgeon will find in his practice patients with diabetes coming in, not as emergencies, but for routine surgical operations. It is in this class of patients that his skill and care is put to the test, for again he has the hazard of an added risk. When the surgical lesion, therefore, is not infected, or is chronic, there is no need for haste, and the most favorable conditions should be obtained before operating. The aims of this pre-operative preparation should be complete freedom from acidosis, a sugar free urine, and adequate reserves of glycogen, fluids and salts. In fact, the road is clear. He must steer between two conditions—not too much sugar, and not too much insulin.

PRE-OPERATIVE PREPARATION

Walters, Meyerding, Judd and Wilder[1] have discussed this subject exhaustively and I shall quote when convenient from their articles.

"The patient is observed in the hospital for a few days while a measured diet is prescribed and sufficient insulin is given to clear the urine of sugar and to free it of ketone bodies. The diet of these patients is made somewhat richer in carbohydrates to provide extra glucose for storage as glycogen. None of our pre-operative diets have contained more than 170 grams of carbohydrates."

Dehydration, which is likely to be present, is combated by fluids, preferably normal saline by rectum or by intravenous injection. "On the morning of the operation no food and no insulin is given." It is not believed that the injection of insulin before going to the operating room is of great value. In my own experience I have found the use of pre-anaesthetic narcotic of value, rather than harmful, and I do not hesitate to give the usual morphine and atropin along with some form of barbital, because I firmly believe their use will reduce the amount of anaesthetic agent used. I am satisfied to proceed with any routine operation if the urine has been free from sugar for 12 hours, and the blood sugar has dropped to somewhere in the neighborhood of 160.

In a recent case the blood sugar was reduced from 286 to 166 in two days and a lengthy abdominal operation with no untoward effects was performed.

ANESTHESIA AND OPERATION

General anaesthetics produce in normal individuals some degree of hyperglycemia and acidosis, a condition which you wish to avoid in the diabetic. In the Mayo Clinic the order of choice of anesthetics follows: "local, spinal, nitrous acid, ethylene and ether." For the past eighteen months I have used ether only when forced to do so by circumstances, and have depended almost wholly on ethylene even in diabetics, and so far see no reason to change. Local, of course, has no question of freedom from danger, but it is time-consuming, and in no other place is the time element so valuable.

* Presented before the Muncie Academy of Medicine, April 9, 1934.

[1] *Minn. Medicine.* Vol. 17, p. 517, 1934.

Spinal anaesthesia, I believe, has an element of danger.

As for the operation itself, there is no one factor as important as time. Any prolonged operation increases the shock and especially in diabetics is this disastrous. So the most essential factor in the operation is a well oiled machine which will function to complete the operation with accuracy and at the same time without the lost motion that is so time-consuming.

POST-OPERATIVE CARE

Generous and accurate cooperation here becomes the watch-word. The physician in charge must be trained to recognize quickly any evidence of metabolic abnormality. Acidosis threatens on the one hand, and hypoglycemia from over-use of insulin on the other. It is probably better to err on the side of too little control rather than too much. Slight glycocemia will do little harm, while an attack of insulin coma often has serious consequences.

Insulin action is shortened by anesthesia, infection and surgical trauma, and your patient upon return to bed should receive his first post-operative injection, and the size of unit should be the same as the last received before going to surgery. Repetition time is shorter than in the non-operative case. As a rule, the first two or three days each six hours is a good criterion. This is determined, of course, by periodic estimates of blood sugar. It is our practice to test for sugar every specimen of urine passed for several days. The free use of saline solution is never overlooked in these cases. Oral feeding is started after twenty-four hours; liquids are given first, with a gradual return to solids.

HEALING OF WOUNDS

The old question, "If they live through the operation, will they live?" has also been answered by medical science. The non-healing of wounds in the diabetic has two causative factors: (1) The improper treatment of the diabetes, and (2) the arterial changes that accompany the disease that call for surgery. The answer to the first is enough and not too much insulin. To the second the answer is high amputation; quick, clean surgery; and careful post-operative nursing.

DIABETIC GANGRENE

For years the bane of the life of the surgeon has been diabetic gangrene, that class of cases which we dreaded to see, and in which the prognosis was grave, and surgery done purely as a palliative measure. Now all this is changed. In the first place, if the medical profession is on its toes, and if the individual physician is thorough in his routine examinations, the diabetes will be discovered early, appropriate treatment given, and the necessity for amputation will be forestalled in a great majority of cases.

The treatment even at this day divides itself into either medical or surgical. The review of Allen and Knitner of gangrene as a complication of diabetes indicates that one should "either operate early and operate high or treat the lesion medically and avoid all surgery." Between 1922 and 1931, inclusive, 69 cases were treated medically with a mortality of 23% and 86 treated surgically with a mortality of 11%. Our attempts to save feet by amputation of toes, by open drainage and by other minor surgical procedures are certainly hazardous. And in our hands the mortality in such cases quite equals that in cases treated medically alone. In the presence of infection and in the absence of gangrene, the patient is put to bed, the foot elevated, and the glycocemia rigidly controlled. As for the local applications, here they certainly are helpful, and although we look with respect on the time-honored remedy of fifty per cent alcohol and saturated solution of boric acid, still our best results have been attained with a weak solution of warm, (not hot) lysol. These methods with the rigid use of insulin are today saving a goodly number of feet. In the presence of gangrene, and it may be wet or dry, depending upon the presence of infection, you have a distinct problem. An infected or wet gangrene may call for early radical action, but we believe that 24 to 48 hours may be well spent in local treatment with warm lysol solution both to control infection and at the same time to prepare a patient to resist the surgical attack if that is decided upon. Of course, your insulin is crowded to the point of tolerance. Amputate whenever the infection and redness go beyond the ankle. Amputate amply high; below the knee if popliteal pulsation is normal, and above the knee if not. Here, if anywhere, a chop amputation will save time. Rigid pre-operative preparation and careful post-operative care are essential, and above all the proper carbohydrate balance should be maintained. Otherwise the stump is treated as would be done in amputation from any other cause.

ULCERS AND OTHER SORES

Lesions and abrasions on the feet are common, and in the absence of diabetes are treated as such. In the diabetic patient they may assume serious aspects, as in the easy tendency for infection to spread, and the more serious complication of developing gangrene.

The treatment is quite different. X-ray may be of value. Heat must be applied with caution and usually only above the knee, for the diabetic is easily burned. There is always the presence of more or less arteriosclerosis. The treatment is similar to that of medical treatment of gangrene, namely, warm applications of lysol solution, the well regulated administration of insulin, and the well regulated diet.

CARBUNCLES

The development of a carbuncle on any patient is an urgent warning to examine the urine for sugar. Fortunately they are not very common, but unfortunately they are a deadly complication. The mortality rate is given variously as 25% to 60%.

Rest assured that any patient with a carbuncle is a bad risk, and if this patient is a diabetic, the risk is multiplied many times.

X-ray is of value in limiting the spread of infection. Heat lessens pain and paves the way for drainage. In the presence of sugar in the urine, all cutting operations should be carefully avoided until the infection is well walled off, and then as little as possible should be done. Strict rest in bed, rigid control of the glycocemia by insulin and diet, and local warm dressings, are in order.

At the Mayo Clinic, the use of methenamine intravenously over a period of several days has been found to be advantageous. A forty per cent solution of methenamine was used over a period of seven days. While I have not much to say for the use of vaccines generally, I am convinced that in some cases of carbuncles, undoubtedly vaccines have been beneficial. In my hands, the stock vaccine has worked fully as well as the autogenous vaccine. I have never had any reason to believe that the use of vaccines either aided or hindered the diabetes.

The following case report illustrates not only the manner of handling these cases, but also the folly of overlooking the ordinary urine examinations. This case fits the group of cases which come in for operation for some surgical condition entirely removed from diabetes.

CASE REPORT

White female, age 47. Married. Mother of 5 children, youngest about 3 years old. Entered hospital February 11, 1934.

Patient had complained of pain over a period of two years, in the lower left quadrant of the abdomen; much worse in last two months.

Chronic constipation with some pain and tenderness over head of caecum was present. A bulging mass was easily diagnosed as a femoral hernia on the left side.

Diagnosis: Left ovarian cyst; left femoral hernia; and chronic appendicitis. There was nothing of significance in the past history except one attack of influenza, mild in character. Close questioning revealed that the patient had had some frequency of urination. She had no knowledge of any metabolic disease which would have been disclosed by urine examination, and she had been under the care of a physician for the previous past two years, but he had no knowledge of existence of diabetes.

The patient came in for surgery, and was prepared for operation in the usual way. She entered one afternoon, and arrangements were made for surgery the following morning, February 12, 1934. In routine laboratory examination on the evening of entrance to the hospital she was found to have urinary sugar of 6.2%. Immediately blood sugar was estimated and found to be 284 mgs.

Operation was postponed and the patient put on diet and insulin, and a general physician was called to see the patient and take charge of the medical treatment which, for the time being, consisted in getting the urine sugar free and the blood sugar near enough normal so that she could stand the shock of the operation. This required only three days.

The following chart will show records of both blood and urine sugar before operation, immediately thereafter, and during her period of recovery in the hospital.

CHART SHOWING URINARY AND BLOOD SUGAR

	Urinary Sugar	Voided Specimen			Blood Sugar
2-11-34	Entrance 6 2%			2-11-34	284 Mg.
2-13-34	Neg.	1%		2-13-34	256 Mg.
2-14-34	Neg.	Neg.		2-14-34	166 Mg.
2-15-34	Neg.			2-15-34	230 Mg. Operated this a. m. at 8:00
2-16-34	1.7%			2-16-34 8:00 a. m.	270 Mg. 5:00 p. m. 200 Mg.
2-17-34	2.5%			2-17-34 7:00 p. m.	224 Mg. Normal 80-120
2-18-34	1.7%				
2-19-34	2.27%	1%		2-19-34	185 Mg.
2-20-34	3 2%				
2-21-34	1.78%				
2-22-34	1.78%	1.01%		2-22-34	190 Mg.
2-23-34	1.7%	.42%	Neg.		
2-24-34	Neg.				
2-25-34	Neg.	Neg.			
2-26-34	Neg.	Neg.	Neg.	2-26-34	152 Mg.
2-27-34	Neg.				
2-28-34	Neg.	Neg.	Neg.	2-28-34	103 Mg.
3-1-34	Neg.				

The patient left the hospital March 1, 1934. Her general condition was good, and her wound healed without the slightest suggestion of drainage or delayed healing. We have been able to follow this case rather closely since her return to her home and her family physician. For some weeks the doctor administered the insulin and then taught the husband to make simple tests for sugar and to give insulin. To date her health has been good, and she has gained weight. She does her own work, and has learned by her feeling when to expect sugar and to return to insulin.

The diet after returning home was woefully neglected.

CONCLUSIONS

1. Due entirely to the efforts of medical science, the diabetic has been converted from a liability to an asset in the balance of society.

2. A diabetic is even more likely than the non-diabetic to come to surgery because of his lowered resistance, because of his tendency to arteriosclerosis, and because of his tendency to develop serious consequences from what in the normal patient would be a trivial injury.

3. These patients now come in much more often for routine surgery with a hopeful prognosis than for amputation for gangrene with a hopeless prognosis.

4. Because of the rational use of insulin and the regulation of diet, a diabetic now becomes a relatively safe risk for any kind of surgery.

5. No emergency is too great for a chemical analysis of the urine and a shot of insulin, if indicated.

6. By careful examination, the presence of diabetes should be found early, treatment started, and in many cases, the development of gangrene prohibited.

7. Regardless of treatment, cases of gangrene will develop. These call for quick, high amputation, after careful preparation with insulin and diet.

8. Slight abrasions in the diabetic may develop into serious lesions and require careful diagnosis and treatment.

9. Carbuncles are always a danger signal, and always call for urine and blood sugar examination, as well as extremely careful treatment if diabetes is present.

10. The pre-operative and post-operative care of the diabetic is certainly as important as the operation, and in no class of patient is the cooperation of the internist, the laboratory worker, the patient, and the surgeon as essential as in operating the diabetic.

HOBBIES FOR PHYSICIANS*

C. B. PAYNTER, M. D.
SALEM

It is a fascinating hobby for some of you, perhaps, to search for the truth in medicine, that it may bear its true relation to the ills that beset us, but some of us in the pursuit of happiness and relaxation seek other channels to while away the hours after the day's work is done. It is the composite of all of our activities that rounds out our lives, and by sprinkling work with recreation we can more enthusiastically bear the burden of our own toil and more intelligently apply our knowledge in the pursuit of our vocation.

In our medical meetings too much time is devoted to the scientific discussion of the problems of our profession, but let me remind you that in your enthusiasm for a hobby, you must not forget that the care of the sick is your obligation to humanity and that longevity and happiness are likely to be found at the end of the rainbow of service.

Those who pursue a hobby to seek remuneration therefrom usually have failed in their original calling, yet many have scaled the heights of prominence because of special aptitude in being able to express themselves, beautifully and intelligently, in other ways than in their chosen profession. The true physician (and the one who is successful in his work) does not seek relaxation until his professional obligations are fulfilled.

Many hobbies are the outgrowth of youthful disappointments or of ambitions unrealized. There is ever that strife within one's self to seek satisfaction by striving to scale the heights of that which has been unattained.

PUBLIC HEALTH

One of the greatest fields that has been thrown open to us has been through the public or political avenue. Right here I want to mention, chiefly because I do not believe it, the implication frequently made that medical men who have taken high places in the councils of our public or political life have deserted their profession in order that they might earn through other channels the plaudits of their countrymen which were denied them through lack of professional ability. It is, of course, natural that some, as they grow in the estimations of those with whom they deal, will undertake to carry into public life the same unselfish service that they have been rendering in their local communities. In our early history, as far back as 1628, there was selected from the colonists Dr. John Pot to act as deputy governor of the Colony of Virginia, and Dr. John Winthrop as Governor of Connecticut. The foundation was then laid for many of our eminent medical men to scale the political heights in years to follow. Doubtless, even these two received their ambition from those early pioneers of the Far East, Machaon and Podalirius, sons of Aesculapius, who were excellent practitioners and also political leaders in early Greek history.

In recent years there have been many physicians introduced into public life. Dr. Hubert Work, a former president of the American Medical Association, was chosen by President Coolidge to serve in his official family under the portfolio of Secretary of the Interior, and this same position was held by another eminent physician, Dr. Ray Lyman Wilbur. I never have been able to learn the reason, but I presume that because of their intimate knowledge of the interior of the human, the Presidents thought these men might be equally capable of investigating and managing that same part of our political body. At least, if my recollection serves me right, they got by without any casualties.

One physician who approached the pinnacle of political fame was Dr. Leonard Wood, Major-General, who once served as military governor of Cuba and who used his professional knowledge to advantage in that great campaign against yellow fever. It has been said that Dr. Wood only missed the presidency of the United States through political manipulation. He afterward was sent to the Philippines where he again combined his political position with his medical education, and at the time of his death he was using both to eradicate leprosy. Truly this great soldier, through his political hobby, brought honor to the medical profession.

In every country in the world physicians have taken their place in moulding the political history. And let me say now, by way of diversion, that if more physicians who are interested in the welfare of our profession do not take an active interest in politics, "The goblins 'll git us ef we don't watch out."

Out of these political positions, or rather because of them, some queer things have happened. Guillotin, one of Europe's famous physicians, was a great political dabbler. Strange to say, he will never be remembered because of any health measures he advocated, but rather as the man who supplied a name for that strange killing device which is yet used in capital punishment in some countries. This machine of legal extermination was invented by another physician, Dr. Alphonse Louis,

* Presented before the Third District meeting at Jeffersonville, October, 1934.

who named it after Guillotin, because he said he (Guillotin) was constantly advocating more humane methods of extermination for capital punishment.

I dare say in the majority of instances where physicians have sought political preferment the efforts have not led to paths of glory, but served only as diversified activity.

Before we pass on to something more pleasant, let us again be reminded that there are those around us who would seek to glorify themselves without the years of study and toil that are required to master medical science, by destroying our initiative and eventually placing us under a political commission to be appointed by the President, the personnel of which would be drawn from a political pot with non-political leanings. Let us at least have a political hobby by interesting ourselves before each election sufficiently to see that men are nominated to office who would not be inimical to our profession.

LITERATURE

The field of literature has been a happy one for many of our professional friends, as writers of scientific formulae, histories, novels, geographies, biographies, philosophy, poems, essays—anything and everything; there has been nothing to silence the pen as it gave expression to hidden knowledge or emotion—some of it good! It is a means of giving vent to nerves on edge, thereby soothing or serving as a tonic to a tired soul. Who is there to criticize or say in judgment that the result is good or bad? The worst may have given the greatest pleasure and the best the greatest humility.

I can picture now Dr. Holmes, as he sits in front of the grate with his feet clad in old homespun woolen socks, cocked upon an old chair, baking out the last vestige of a hard tramp, musing over the events and conversation with an old, decrepit friend and neighbor, and there in the glow of the embers, dreaming and musing, the spirit of boyish mockery first and then the passionate braggadocio as if to hide the shame of his thoughts:

"But if I should live to be the last leaf upon the tree in the spring,
Let them smile as I do now at the old forsaken bough where I cling."

How different the thought as these lines portrayed his inmost soul:

"Build thee more stately mansions
O, my soul.
As the swift seasons roll
Leave thy low vaulted past.
Let each new temple
Nobler than the last
Shut thee from heaven
With a dome more vast
Till thou at length art free
Leaving thine out grown shell
By life's unresting sea."

It is not as a great physician that Dr. Holmes is best known, but through the pursuit of his hobby; those who have never read his "Autocrat of the Breakfast Table" have missed a rare intellectual treat.

Then there was Oliver Goldsmith, the son of a poor Irish clergyman, who was able only to give inspiration to his children through the heritage of a rugged body and a brilliant mind. Struggling for years to get an education, he first attended the University of Dublin, remaining there long enough to become imbued with a desire to study medicine. He graduated in medicine from Edinburg, but before entering practice, he received degrees from two other universities. Reared in an atmosphere of literature it was but natural for him, during his leisure hours, to write; first it was as a diversion, that he might not think of his patients who would not pay (and he said they were largely in the majority), and finally it was done as a necessity, in order to live.

It is possible that the medical profession lost nothing while literature was enhanced through "She Stoops To Conquer." However, his hobby was his downfall. So great was his income from that one story that he soon drifted into extravagance and dissipation. His reputation as a poor physician was country-wide, and when he became seriously ill he refused to let others prescribe for him, took his own medicine, and passed away. I mention this merely as a warning!

Thomas Lodge was another contemporary physician of Goldsmith's time. He wrote a little book that was widely read, entitled, "Wits, Misery, and the World's Madness." The title is very suggestive and might be applied appropriately to the present.

Many women who hold medical degrees have sought relaxation in the field of literature. Mrs. Helen Johnson is internationally famous for having written a book entitled "Dr. Serocold," and another equally as interesting, "A Background for Caroline."

Mary Jacobis' stories are classics, but many of them deal with intimate stories of her neurasthenics.

These contributions to literature are only a small part of a great volume of intelligently written material that forms a part of our circulating libraries.

There is another who must be mentioned, probably better known than others, and that is Sir Arthur Conan Doyle, the creator of Sherlock Holmes. Dr. Doyle tried many locations and many times to achieve success in his chosen profession but always met with failure. In disgust, and seeking some way to drive the wolf from the door, he turned to writing. At first it was all but failure. He seemed never to be able to use his imaginative genius to advantage; then overnight he scored a success with Sherlock Holmes. No greater stretch of imagination has ever been portrayed by any character in literature, and the wave of enthusiasm which greeted him has never diminished. Dr. Rich-

ard Freeman created Dr. Thorndyke, another mystery character which has also proved quite popular.

There are probably thousands of doctors who are poets of no mean ability. To enumerate them all would require pages, and to give them the praise which is their due would take more adjectives than I have at my command. In whatever field of literary endeavor the physician has sought to assert himself, he has proved to be eminently qualified. His close contact with all phases of life, with every shade of human nature, running the entire gamut of emotions in death and in life, enables him to draw from the well of experience as no other class can, and the zeal with which he goes about the job makes one feel that he has adopted the motto of Dr. Thomas Brown, often called the dean of literary doctors, who said:

"I make not, therefore, my head a grave, but a treasure of knowledge; I intend no monopoly, but a community in learning; I study not for my own sake only, but for theirs that study not for themselves. I envy no man that knows more than myself, but pity them that know less. I instruct no man as an exercise of my knowledge, or with an intent rather to nourish and keep it alive in mine own head than beget and propagate it in his; and in the midst of all my endeavors there is but one thought that dejects me: that my acquired parts must perish with myself, nor can be legacied among my honored friends."

The literary man often has a hobby within his hobby, which is best illustrated in the writing of Dr. John Phillips. With one exception, his poetry never failed to praise the good qualities of tobacco.

Our own profession has received the darts of ridicule and criticism, as best illustrated in the book entitled, "The Quack," and in another called, "The Parish Doctor," both written by physicians.

By the way, did you know that "A Hot Time in the Old Town Tonight" and "Casey Jones" came from the pen of Dr. James B. Naylor, who practices in a little town in Ohio?

Through the majority of this literature there runs a sense of humor combined with dignity; most of it never survives a first edition, but think of all the fun these folks have had!

ART

In the past few years, in the large centers of population, the physicians have grouped themselves together for the purpose of placing on display the output of material which is the result of their idle time. Some four or five years ago, in New York, there was on display for the entertainment and edification of the public some 545 artistic works produced by 78 physicians. There was one very conspicuous thing because of its absence—medical subjects. The predominant subjects were landscapes and portraits; a few pictures were devoted to animal life. There were water colors, oil paintings, etchings, book plates, drawings, lithographs and pastels, sculpture, plaster work and plastic wood. It was said the quality of work was such as would compare favorably with that of the French, British or German physicians. The medical society of New Jersey fosters the work of its physicians along the lines just mentioned, by holding frequent exhibitions to display the work of its members. Chicago and Cleveland have similar exhibitions. Rochester sponsors an exhibit that draws thousands of visitors. There are some very unique things on display that give you an idea of the diversity that is manifested, such as the homemade telescope, the models of ships, both ancient and modern, a display of tropical and oriental fish, a collection of all types of pistols, old armor, old coins, stamps, clocks, old furniture, and medicinal plants.

In Seattle, Washington, the exhibitions are limited to collections of musical instruments, and when they meet some one of their number has the ability at least to make a noise upon them.

You must not think that all the hobbies originate in places far away. Indiana has some that are outstanding. I might mention golf, tennis, and base ball. A number of coon hunters have fine collections of fox hounds, and every fall during the open season on birds there is rivalry between physicians as to the merits of their pointers and setters. I wonder how many physicians' offices you could enter and not find the rod and reel? Do you know that one of the largest peony farms is in our own state and is owned by a physician? Do you know that here in our own district are several doctors propagating old and new types of dahlias? Love of nature provides excellent hobbies.

As a sort of preamble to another diversion, and one that is indulged in by many of the most eminent men in our profession, I want to quote first these words written by R. L. Stevenson, an invalid throughout life who has paid this tribute to medical men:

"There are men and classes of men that stand above the common herd; the soldier, the sailor, and the shepherd not infrequently; the artist rarely, more rarely still the clergyman; the physician almost as a rule. He is the flower (such as it is) of our civilization; and when that stage of man is done with, and only remembered to be marveled at in history, he will be thought to have shared as little as any in the defects of the period, and most notably exhibited the virtues of the race. Generosity he has, such as is possible only to those who practice an art, never to those who drive a trade; discretion tested by hundreds of secrets, tact, tried in a hundred embarrassments; and, what are more important, Herculean cheerfulness and courage. So it is he brings air and cheer into the sick room, and often enough, though not so often as he wishes, healing."

What a tribute! And yet how many of those who spend long hours to live up to that tribute are satisfied to let their lives stand simply from the standpoint of their profession?

MUSIC

I suppose in every one there is some music or at least some desire for it. It's a hard-boiled man who cannot be stirred by the strains of martial music. From the discordant notes of the primeval forest there has been produced through scientific application of sound, the melodious strains of grand opera. There has been a type to suit every ear and, strange as it may seem, our own physicians stand out through the ages as having played a prominent part in that development, through the sheer love of pursuing it as a hobby. Were I to read the long list of composers and musicians it would sound largely like the roll of foreign emigrants unloading at the pier at New York. It is probably true that most of the artistic compositions are the products of the medical men of Europe. However, there are literally thousands of American physicians who while away their idle moments playing some kind of musical instrument. It is said to be the most effective way of giving expression to your feelings. So, too, the songs composed often give vent to the feelings of the composer, some in a vein of hilariousness, some tinged with a religious sentiment leaving no doubt of the composer's longing. This feeling is best illustrated in the poem of that great Canadian physician, traveler, and author, John McCrae, who wrote this sonnet, which will ever bring to mind the human sacrifice of the World War:

"In Flanders fields the poppies blow
Between the crosses, row on row
That mark our place; and in the sky
The larks, still bravely singing, fly
Scarce heard amid the guns below.

"We are the dead. Short days ago
We lived, felt dawn, saw sunset glow,
Loved and were loved; and now we lie
In Flanders Field.

"Take up our quarrel with the foe.
To you from failing hands we throw
The torch; be yours to hold it high.
If ye break faith with us who die,
We shall not sleep, though poppies grow
In Flanders fields."

We could go on and on bringing to you outstanding things that have been accomplished, with striking examples of great ability, showing how our medical friends have in their care-free moments brought cheer and happiness to all humanity in ways other than through the field of their chosen profession, but these will suffice. The pursuit of something other than that through which you earn your livelihood is time well spent.

(The author desires to acknowledge helpful suggestions from the American Medical Association in the preparation of this paper.)

A CONSIDERATION OF THE TREATMENT OF COMPLICATED APPENDICITIS

(VARIOUSLY GROUPED AS PERFORATED, GANGRENOUS, AND SUPPURATIVE APPENDICITIS, APPENDICEAL ABSCESS, LOCAL AND GENERAL PERITONITIS)*

E. D. CLARK, M. D.
and
J. K. BERMAN, M. D.
INDIANAPOLIS

In 1759, Mestevier of France reported a case of perforation of the appendix by a pin. A perforated appendix was shown to the Medico-Chirurgical Society of London in 1812, and twenty years later Southam reported an appendiceal abscess. But it was Dr. L. Melier of France who first described the clinical and pathological features of appendicitis in 1827. Howard Kelley quotes him as follows: "If it were possible to establish with certainty the diagnosis of this affection, we could see the possibility of curing the patient by operation. We shall perhaps some day arrive at this result."[1] The medical world listened but did not heed this young surgeon's advice. Dupuytren was the all-powerful surgical leader of his time and physicians awaited his comment. However, he made none until 1833 when he announced that any abscess in the right iliac region was the result of cecal, not appendiceal disease. For fifty-three years after this statement, and for fifty-nine years after Melier's paper, the medical world followed the implacable Dupuytren who was wrong, and ignored Melier who was right. It was not until Reginald Fitz in 1886 read his paper upon "Perforating Inflammation of the Vermiform Appendix" that physicians really considered the disease in a serious manner, and since that time volumes have been written upon the subject. In spite of it all, however, the mortality is still very high. It is particularly high in those cases which have gone on to perforation. No doubt some will say, "Appendicitis shouldn't go that far," but we shall always have with us those who, because of ignorance or bad advice, procrastinate. This is mostly the fault of the laity, sometimes unavoidably so, but strangely enough it is partly the fault of our own colleagues. Be that as it may, this dreaded complication is still seen in the Indianapolis City Hospital in about 15% of the cases. In this group the mortality varies in different hospitals from 9% to the staggering figure of 33.3%! Is it any wonder that we should seek to analyze our treatment?

The best way to learn the efficacy of surgical treatment for a particular disease is to study the

* From the Department of Surgery, Indiana University School of Medicine and the surgical service of the Indianapolis City Hospital.

[1] From the *Jour. Gen. de Med.*, 1827. Vol. C, p. 317, as quoted in Da Costa's Textbook of Modern Surgery, eighth edition.

natural course of that ailment and then see if surgery has helped to decrease its morbidity and mortality. This has been beautifully illustrated in the recent trend toward conservative management of gonorrheal salpingitis. Formerly these pelves were subjected to radical surgical intervention; now many of them are not operated upon because it has been found that a much higher per cent recover under conservative treatment than was formerly believed. How does acute appendicitis terminate if untreated? This question may be answered with precision, because thousands of cases have been scrutinized with the above question in mind. First, it may undergo spontaneous resolution; this, according to Love,[2] occurs in about 65% of the cases. No doubt a great many inflamed appendices do this. Statistics vary concerning this point; however, most figures are lower. Second, there may be necrosis with absorption. Third, the appendix may undergo fibrosis. Fourth, suppuration with infiltration of all the layers of the appendix wall may occur, and whether with or without perforation an abscess (25% according to Love) or peritonitis may result. Fifth and last, gangrene and sloughing with its many complications may develop, such as abscess formation, localized, and even generalized peritonitis. Most of us gave up the idea long ago that we could predict which appendices would, and which would not go on to perforation. We therefore believe that surgical intervention is safer than the trust to chance, so we logically advise prompt removal of the acutely inflamed appendix as soon as the diagnosis is made.

But suppose perforation with beginning abscess formation has already occurred—what then? The natural course of this situation may spell disaster if untreated, and there is unanimity of opinion concerning this. When to operate and whether to remove the diseased appendix or merely drain is a much debated question. The post-operative management is important in general peritonitis and requires our consideration. One group warns against surgical intervention in the presence of a "Spreading peritonitis and operation before walling in has occurred." Another advocates just the "right moment" for operation as determined by various symptoms and signs, and a third does not agree with either of the foregoing and intervenes as soon as the diagnosis is made. Again there are those who remove only "free" appendices lest "the trauma involved in appendectomy break down nature's barriers"; and those who are selective but leave the appendix if in doubt, and still others who remove all diseased appendices if at all possible. Before proceeding with our discussion we must admit that no general law can apply to all cases. If so, there would be no need for surgical judgment. However, there are rules which are fundamental and which may serve as a guiding philosophy in the handling of these difficult cases, although they must be of necessity extremely flexible.

We must first consider the patient as a whole. A good aphorism to remember is as follows: A patient with a general bacteremia will usually recover if his acute focus of infection can be found and eradicated. Merely draining an appendiceal abscess does not in all cases eradicate the acute focus of infection; and if not an actual cause of death from septicemia it is certainly a menace because of the frequency of complications when a gangrenous appendix is left behind. Multiple abscess formation in the pelvis, subphrenic abscess, draining sinuses and crippling adhesions are some of the sequelae to be feared. True enough we may go back and remove the appendix later; however, this only adds to the burdens of an already overburdened patient. Also true, a great many appendices left behind undergo fibrosis and never give any further trouble. But here again, we do not know which are going to do this and feel that we must not take the chance. There is an occasional appendix which is already an intimate part of a thick, fibrous abscess wall, and which could not be removed without removing this wall in part or injuring the bowel; here we would be compelled to leave the appendix. This situation must be unusual for we have encountered it only on rare occasions. We attempted to prove or disprove this theory statistically and we found upon studying the charts in 520 cases that 455 could be classified as perforative appendicitis. Of this number 383 had immediate appendectomy performed with a mortality of 4.12%. In 20 cases the appendix was not removed, and simple drainage alone was done. There were 4 deaths in this group, or a mortality of 20%. A similar study of 258 cases in the Indianapolis City Hospital gave an even greater difference in the mortality rate in "drained only" cases. It would seem on the basis of the surgical pathology present and the probable resulting morbidity and mortality, that appendectomy is preferable to simple drainage and a logical rule to follow is: "Remove the diseased appendix whenever possible. Enter the abdomen preferably through a gridiron incision; and be extremely gentle in your manipulations."

If this hypothesis is correct, then the second problem that requires our careful consideration is, shall we remove the appendix and drain the inflamed area as soon as the diagnosis is made, or shall we wait for localization to occur? This question has been the subject of perennial debates since the disease was first described. Sir James Berry[3] in a recent address before the London Medical Society on the subject "Fallen Idols" pleads for extreme conservatism, even in the first twenty-four hours of the disease.

Mr. P. H. Mitchener follows with a paper en-

[2] Love, R. J. McNeill: The Treatment of Acute Appendicitis. *The Lancet* 1:1229-1230, June 10, 1933.

[3] Berry, Sir James: Fallen Idols. *Lancet* 1:1027-1030, May 14, 1932.

titled "Wait and See in Acute Appendicitis."[4] He operates upon the patient with acute appendicitis during the first forty-eight hours but waits thereafter. R. J. McNeill Love[2] supports his colleagues with the following statistics:

Immediate operation—
Mortality 5.8%
Expectant treatment—
65% Resolve, subsequent mortality 1%
25% Form Abscess, subsequent mortality 4.5%
10% Treatment abandoned, subsequent mortality 6%
Average mortality with expectant treatment under 3%

These statements provoked much discussion and debate upon the subject throughout England. Gunnar Bauer answers the challenges by his statistics which tend to prove that delay is hazardous.[5] R. A. Ramsay[6] pleads for immediate operation if seen early or if symptoms are increasing in the late cases. Lord Moynihan[7] finally summarized the "British attitude" as follows:

If a case of acute appendicitis is seen in the first 4 to 6 hours, immediate operation is desirable.

If seen after this and if an aperient has been given, immediate operation is desirable.

If no aperient has been given wait for localization, but while waiting nothing must be given by mouth, the patient must be at absolute rest with enough opium to keep him so, and of course no enemas or cathartics may be administered.

The attitude of American surgeons is just as varied as that of their British colleagues if not more so. In the paragraphs that follow let us analyze the arguments for and against delayed treatment in the perforative cases of appendicitis. The proponents of delayed surgical treatment say that we must wait for localization, just as we do with a boil; that we can tell which case is going to localize by the symptoms and signs; and that even though the delay is hazardous, it is worth the trial, for if localization does occur the operation is very much safer, and if it does not, nothing has been lost.

Surgeons who are in favor of immediate surgical intervention aver that they cannot predict which cases are going to localize, any more than they can tell whether or not an acute appendicitis is going on to a spontaneous resolution. They believe that the future of every case is clouded with uncertainty and that if general peritonitis should occur it would result in a needless fatality. The symptoms and signs they know are often misleading. A "delusive calm" may occur which may actually be the onset of gangrene and perforation; or a state of euphoria may herald an impending death from general peritonitis. Lastly they conclude that surgical intervention in perforative appendicitis must be done sooner or later, that it is always a serious operation whenever done, and that the dangers of delay far outweigh the hazards of an immediate operation properly done.

Let us now consider some of the complications that may arise as a result of delay. First, toxemia and starvation may ensue. The former may be due to absorption of toxic products from the peritoneal cavity or the bowel; the latter may be due to the fact that nothing is given by mouth and at best intravenous glucose solution is a poor food substitute, although it will relieve dehydration and improve the condition of the patient temporarily. Second, an abscess may rupture instead of remaining walled-in, with resulting general peritonitis. Lord Moynihan pleads that nothing be given by mouth during the waiting period lest a general peritonitis develop. We believe this is treading on thin ice. In so-called idiopathic peritonitis we drain the abdominal cavity as best we can, knowing that we do not drain the entire abdominal cavity. In chemical peritonitis we close the perforation, if this is the cause, and drain, or not, as indicated, for we know that delay means disaster. In beginning pyogenic peritonitis due to a traumatic perforation of the lower bowel, we close the opening and drain. Then why should we wait in perforated appendicitis?

Suppose that all goes well, and localization does occur. Here we fear pus under pressure, just as we fear it in any abscess. Nature reveals its presence by the local signs of abscess, fever, and leukocytosis. As soon as drainage is instituted, the temperature and the leukocytes drop to normal. It is this pus under pressure which gives rise to septic emboli, multiple contiguous abscesses, extension by tissue continguity up the right posterior colonic gutter into the subphrenic space with resulting subphrenic abscess, perhaps empyema, septic pylephlebitis with liver abscess, and lastly general peritonitis.

Recent experimental work shows that in an abscess the lymphatics are blocked within twenty-four hours,[8] especially in the peritoneum. This allows the inflammatory exudate to accumulate under pressure so that the tissue fluid is actually under great pressure, and, therefore, we find that peritonitis, according to Bower of Philadelphia[9] is the

[4] Mitchener, P. H.: Wait and See in Acute Apendicitis. *Lancet*, 1933, Vol. 1, p. 363.

[5] Bauer, Gunnar: Zur Behandlung der Appendicitis Peritonitis. Acta-Chir Scand., 1933, Supplement XXIV.

[6] Ramsay, R. A.: The Treatment of Acute Appendicitis. *Lancet*, June 17, 1933, p. 1317.

[7] Moynihan, Berkeley: Appendicitis. *Lancet*, May 21, 1932, p. 1119.

[8] Thorsness, E. T., and Higgins, G. M.: Absorption from the Experimentally Produced Abscess. Proc. of the Staff Meetings of the Mayo Clinic, Vol. 6, No. 39, September 30, 1931, p. 578.

[9] Bower, John O.: Acute Appendicitis in Philadelphia. *J. A. M. A.*, Vol. 102, No. 11, p. 813.

Bower, John O.: How the Hospital Management and Medical Staff Can Cooperate in Reducing the Mortality of Appendicitis. Bul. Amer. Co. of Surgeons, December, 1932, Vol. XVI, No. 4A.

cause of death in 73.2% of the fatal cases in his series. Perhaps there is a permeation throughout the peritoneum due to inflammatory exudate and bacteria under pressure. Should this pressure be great enough to force infected lymph thru the blocked lymphatics and should the surrounding tissue block itself quickly and thoroughly by adhesions, there may occur an increase in lymphatic drainage from the part due to partial clot contraction within the lymphatic trunks of permeation thru the clot.[10] This may give rise to multiple abscess formation in the pelvis and subphrenic space.

About the third or fourth day after an infection occurs the capillaries are blocked to crystalloids.[10,11] Now with thrombosed vessels and pus under pressure we have the danger of septic pylephlebitis and liver abscess or septic emboli elsewhere if a systemic vein is involved. If these facts are true, does it not follow that the peritoneum can stand the slight trauma of an appendectomy better than it can withstand pus under pressure? Moreover, when immediate operation is done, we are removing the cause of all the trouble. Lastly, even though delay has been successful and simple drainage has saved the patient's life, the danger of recurrence is still present. There is also a possibility of many of the immediate complications and sequelae already mentioned, in addition to the crippling adhesions which may occur with their ever-present danger of obstruction. J. Chalmers Da Costa has aptly said, "If pus is present some surgeons delay operation in the hope that firm adhesions will form around the pus and that the necessary operation will simply be the opening of an abscess. I do not believe it is safe to delay operation in a pus case. The pus may become limited but it may instead pass up toward the liver or down into the pelvis. Delay is fraught with peril." This philosophy "spoils statistics and may give surgery a bad reputation, but it occasionally saves lives."[12]

Years ago Ochsner said that some patients were too ill to stand any operaton and delay was their only chance. He was obviously referring to the patient who comes to us *in extremis*. Concerning these individuals, we may quote another fundamental maxim in surgery: "There is no surgical procedure that has merit enough to be used on a patient who cannot stand it." This is true of a man with a mangled leg in shock as it is of a man in shock or collapse from an overwhelming peritoneal infection. These patients should have repeated intravenous medication of five per cent glucose in normal saline and perhaps blood transfusion, together with sufficient morphine to keep the bowel in tone and the patient quiet. No food or drink should be given by mouth and continuous heat should be applied to the abdomen. This method of treatment in the desperately sick peritonitis patient gives him the best chance for ultimate recovery, although the road is very hazardous. If he survives, then we should operate upon him as soon as his condition permits, realizing fully the dangerous possibilities previously discussed.

To obtain more accurate information we again reviewed the records of the Indiana University Hospitals and the Indianapolis City Hospital for the past ten years. There were, as have been pointed out, 455 cases of perforated appendicitis in the former. Of this group 383 were operated upon immediately. There were 15 deaths, or a mortality rate of about 4%. In 13 cases operation was delayed (but ultimately done) with a resultant mortality rate of about 15%. Delayed operation in 34 cases at the I. C. H. resulted in a mortality much greater. After careful consideration of all the facts we have come to the conclusion that there is less danger in immediate operation than in delay. (See Figure II.)

One last point of interest is that concerning the postoperative care. All patients with perforative appendicitis are placed on a so-called "peritonitis regime" after appendectomy for forty-eight hours: nothing by mouth, morphine, intravenous glucose solution. Then sips of water and gradual increase in fluids. Steinberg[13] believes that death in general peritonitis is caused by the absorption of toxins from bacteria in the peritoneal cavity. This may be true in most cases; however, there are some patients who present a typical picture of simple mechanical intestinal obstruction. They are distended and vomit profusely; the vomitus becomes progressively more fecal in character; they have cramp-like pains in the abdomen, but if allowed to go on, peristaltic sounds are diminished. On x-ray examination a typical gas pattern is seen. This picture is not uncommon even after the diseased appendix has been removed and all discernible abscesses drained. The obstruction may result from edema and swelling, newly formed abscesses, or simply an overdistended ileum or cecum forming an obstructive gas trap. But regardless of the cause, decompression of the distended loops of bowel is the most important consideration and will usually result in recovery, for when the edema and swelling subside the obstruction is relieved.

Since adopting this philosophy we have been performing appendicostomy at the time of operation if necessary, or more often enterostomy postoperatively when indicated, and we have thereby materially lowered our mortality rate. Without entering into a discussion as to the actual cause of death in peritonitis, we have sufficient clinical proof that in about 6% of our cases obstruction plays an important role. This group was for-

[10] Drinker & Fields: Lymphatics, Lymph and Tissue Fluid. Williams & Williams Co.

[11] Underhill, F. P., Kopsinow, R., and Fisk, M. E.: Changes in Capillary Permeability Induced by a Superficial Burn. *Amer. Jour. of Physiology*, XCV, p. 315.

[12] Da Costa, J. Chalmers: Modern Surgery. Eighth edition.

[13] Steinberg, Bernhard: Cause of Death in Experimental Acute Diffuse Peritonitis. *Proc. Soc. Exper. Biol. and Med.* 28:59. Act. 1930.

merly considered as practically always fatal. Figure I reveals that about half of them are now saved by enterostomy. An interesting observation is that this operation was not found necessary in any of the patients save those who had immediate appendectomy. Trauma due to surgical intervention may be a factor. We feel that with better operative technique and an earlier recognition of the patients needing enterostomy, the indications for this procedure will be lessened and the mortality in the cases where it is used will be decreased. If we are in doubt, we use the continuous suction method of decompression through the nasal tube; in many of these patients, particularly children, the obstruction subsides without the need for enterostomy.

The last point of interest in Figure I is the group of 18 cases not operated upon. In practically all of these cases surgical interference was withheld because localization was sought. Therefore, this mortality, while not properly placed as "delayed surgery," is nevertheless due to this delay. Whereas, we can definitely state that the seven cases that died did so as a result of perforative appendicitis or its complications as shown at autopsy, we are only able to venture upon the accuracy of the diagnosis of "appendicitis" in the other 11 as determined by the clinical picture. Obviously we cannot be sure of the pathological condition of the appendix.

One cannot resist the temptation to philosophize concerning the controversial points in the treatment of perforative appendicitis. The tendency of all surgery today is toward conservatism. The glamorous and spectacular age of surgery when operations were done simply because they could be done without the tremendous mortality of preaseptic days is fortunately gone forever. Conservatism is a benevolent cloak for a surgeon to wear, but it must not smother the wearer because of the delusive safety that it might engender. Furthermore, the exact meaning of the word must be clarified before it is used in argument or logic. However, if we interpret it only in terms of the patient's life and its freedom from disease, then the most radical procedure known may be termed conservative. The history of the treatment of acute appendicitis swings like a pendulum from so-called radical to so-called conservative treatment, then back and forth again. The surgical and medical world is now again pausing for reflection and consideration of its endeavors. Each group is sincere in its belief, honest in its efforts and striving for the same altruistic end. Which group is right? There is no rule of thumb in the practice of medicine and surgery; that is why it is an art and not an exact science. We must, therefore, carefully scrutinize these various opinions and their proofs and then practice that philosophy which seems most logical to us. If in its pragmatic application it is found wanting, we must cast it aside and renew our search for the truth.

FIGURE I

SUMMARY OF CASES OF ACUTE APPENDICITIS ADMITTED TO INDIANA UNIVERSITY HOSPITALS

From January 1, 1924, to December 31, 1933

1. Total number of appendectomies performed.....520
   Mortality 3.07%
2. Total number of cases classified as:
   Perforated
   Appendiceal Abscess
   Gangrenous
   Suppurative
   General Peritonitis
   Local Peritonitis
   } 455
   Mortality 9%
   A. Immediate Surgery:
      Appendectomy 383
      Deaths 16
      Mortality 4.12%
      (Witzel enterostomy was subsequently necessary in 22 cases of this group. There were 13 deaths, a mortality of 59.09%. These deaths were included in the 16 above.)
      Drainage only 20
      Deaths 4
      Mortality 20%
      Enterostomy 0
   B. Delayed Surgery:
      Appendectomy 7
      Deaths 1
      Mortality 14.2%
      Enterostomy 0
      Drainage only 6
      Deaths 1
      Mortality 16.6%
      Enterostomy 0
   C. Not operated on 18
      Deaths 7
      Mortality 38.8%

FIGURE I

INDIANA UNIVERSITY HOSPITALS

Immediate surgery (whether appendectomy or simple drainage) 403
Deaths 20
Mortality rate 4.9%

Delayed surgery (whether appendectomy, simple drainage or no operation) 31
Deaths 9
Mortality rate 29.02%

SUMMARY

The records of 2,325 cases of acute appendicitis were reviewed. From a study of 713 cases of acute perforative appendicitis as treated by members of the surgical staffs in the Indiana University and Indianapolis City Hospitals, together with a proper evaluation of the findings, we may conclude that:

1. Acute perforative appendicitis is best treated by immediate operation.
2. Appendectomy is preferable to simple drainage.
3. Enterostomy and syphonage by duodenal tube are valuable aids in simple postoperative obstruction following appendectomy.

We desire to acknowledge the helpful assistance of Miss Helen M. Wagoner and Miss Mary O'Connor in preparing data from case records.

THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION
DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

Office of Publication: 1021 Hume Mansur Bldg., Indianapolis.
Editor: E. M. SHANKLIN, M. D., 5141 Hohman Avenue, Hammond, Ind.
Managing Editor: THOMAS A. HENDRICKS, 1021 Hume Mansur Building, Indianapolis

Editorial Board:
F. T. ROMBERGER, M. D., Lafayette.
T. B. RICE, M. D., Indianapolis.
PIERCE MACKENZIE, M. D., Evansville.
L. P. HARSHMAN, M. D., Fort Wayne.
ERNEST RUPEL, M. D., Indianapolis.

JULY, 1935

EDITORIALS

CONTRACEPTION BY "PERIODIC ABSTINENCE"

It has been said that notwithstanding all of the methods of conception control, the mistakes will keep the population of the world well up to average. No method is fool proof. Especially true is this of the present very much discussed contraception by rhythm. Publishers are hurrying to get books on the market about it, and rhythm is being discussed in popular magazines and at the bridge tables along with the NRA and Shirley Temple. Priests, ministers, neighbors, and social workers have become practicing physiologists. Already we are getting results of misadvice and no doubt soon will be getting them in greater numbers.

Essentially the Ogino-Knaus theory is that ovulation takes place between the twelfth and sixteenth day *before* the onset of the *next* menses and that this is the fertile time of a woman's cycle. Here comes the difficulty: the exact date of the next expected menstruation cannot always be accurately estimated. In other words the method is only applicable to the woman whose cycle is within bounds of a regularity which can be classified.

It is believed that the ovum is able to be fertilized by a sperm for twenty-four hours and that a sperm may have the ability to remain able to fertilize an ovum for forty-eight hours after being deposited in the vagina. Thus to the four days referred to above must be added one day taken from the twelve and three days added to the sixteen days before the next expected period, giving a possible fertile time of eight days. This leaves eleven sterile days before the next expected menses and accounts for nineteen days of the cycle. These days subtracted from the total days of the ordinary cycle leave the number of sterile days during the first part of the period. If the cycle is twenty-eight days, this leaves nine days. However, if the period lasts five days only, four days are left for intercourse and in proportion. It is obvious that any variation in the cycle will influence the number of sterile days during the first part of the cycle, and any inaccurate knowledge of the exact time of the yet-unknown expected period will upset the estimation of the fertile or dangerous days. Some good authorities are not so sure of their physiology and think the preovulation days are only "practically sterile" and that the safest rule is to confine unprotected sexual activity to the six or seven days before the next expected period.

Since it is advised to keep a record of the periods for at least eight months before a definite cycle can be estimated, since some women never menstruate regularly, when in young brides and often other sensitive women many outside influences change the regularity from month to month, and when after a pregnancy the cycle is often not established for a year or more, it is easy to understand that this method cannot have a universal application. We have, then, a method more correctly named "periodic abstinence" than periodic sexual activity.

For those women whose "religious scruples are stronger than their erotic impulses" and for those women who can sublimate the yearnings of their husbands to mathematics, this method will be a help. There is little danger that it will make obsolete all other forms of contraception.

SOME SUPREME COURT DECISIONS

When the Supreme Court of the United States handed down several momentous decisions, among them being the railroad pensions act and the NRA, both of which were declared to be unconstitutional, national interest was thoroughly aroused. It has been a long time since two decisions so generally affecting the citizenry of this country have been given out by the august body which commonly is termed "the greatest tribunal in the world."

While we do not pretend to be possessed of a legal mind, yet a study of these decisions seems to merit several conclusions, among which is the fact that these decisions have a far-reaching effect on the economic phases of medical practice. Coming at a time when we are beset by the spectre of socialized medicine, to us these decisions have a decidedly quieting effect, for we foresee in them vast possibilities; we believe that they make fairly clear the fact that the Supreme Court of our land, in no uncertain terms, has decided that governmental interference with private affairs has a definite and distinct limit. We base that observation on the declaration of the Court that in the case of the railroad pension bill, Congress exceeded its prerogatives when it ordered the railroads of our country to go into the pension business. In that declaration the Court held forth to the effect that here was an interference with private business

that was quite beyond the powers of Congress to control. Again, in the decision re the NRA, the Court made numerous references to interference with private business affairs.

It requires no strength of imagination to correlate these decisions with certain phases of our greatest bugbear, socialized medicine. In the light of these mandates of the Court, we cannot see how Government can legally enter into the practice of medicine, which is just what socialized medicine means. As we say, we take a great deal of comfort in reading and re-reading these decisions; we believe them to be of most favorable portent.

PANEL SYSTEM IN MEDICINE

One of the criticisms of the medical press, and one that is not entirely unfounded, is that while we have had a lot to say as to the evils of any and all forms of socialized medicine, yet we do not say enough about the actual experiences of physicians who have been more or less engaged in that form of practice in the various countries in which it is in operation. One of the most striking comments on this subject that has come to our notice is a letter from Paul G. Frank, published in the *New York State Journal of Medicine*, May 15, 1935. Dr. Frank speaks from personal experience, gained in a service in the panel system of Germany over a period of thirty years, during most of which time he was a member of the physicians' committee. We take the liberty of quoting liberally from this letter, since it seems to be a very lucid description of the evils of such a system:

"During the thirty years of my experience in Germany I witnessed a deterioration of the medical profession. It was gradual. It came about by the removal of the sanctions of preferment by skill and the substitution of preferment by convenience. What I mean is that an insurance scheme soon becomes a business—it must do so to succeed, while the practice of medicine must be a profession to succeed at its best, and the two will not mix. In Germany the physician who was most adaptable to the advancement of the plans of the insurance officials, and who most pleased the patient for reasons perhaps quite other than skill, obtained the most rapid preferment. It is true there were possibilities left which made it possible to adhere to higher standards—I for instance had such a possibility being a specialist—but many men who might have gone far were ruined by the stultifying panel practice.

"In the late nineties at the university we did not much esteem the panel idea. In those early years of state insurance even the lay public knew these doctors to be second-rate. Some years later when I left the university clinic I ceased to laugh at the panel doctor, for I became one myself. My fee averaged 50 cents each for medical cases of three months' duration! Figure out for yourself how many of these I had to have to live decently, and figure, also, how much time I could give to each case. Of course, it goes without saying that a young man of high professional ideals does not think first of the money, but first of his duty to his patient; yet he is forced, under sickness insurance, to make a decision between these two motives which often disastrously affects his attitude toward his work. It is only too easy to weaken, for he must live. The trouble with the scheme is that it encourages careless work by making it more easily profitable; the individual practice encourages good work, by making it, in the long run, more profitable.

"I dislike to touch upon the fact that the quality of young men choosing medicine as a career has not improved under sickness insurance, yet I believe it to be true. Bismarck hoped to combat socialism by such insurance, but on the contrary, it worked to encourage socialism. As a result there has been built up a bureaucracy which governs the whole system, and its members have been drawn from the laboring, clerical, and generally less educated classes. More and more as the years go by the young students of medicine come from families of perfectly respectable, but not superior intellectual and emotional background. Response to professional traditions calls for certain native attitudes which are not always acquired through university training alone, yet are of great social value in those who are to practice the difficult and dangerous art of healing.

"The American people will do well to pause long before adopting sickness insurance, remembering that such a system once instituted is sure to perpetuate itself. I have been in this country a year and a half. Some of the hospitals here are the most wonderful I have seen anywhere in the world, and I have travelled extensively in Europe. I wonder whether the average quality of medical care given in the United States is not superior to that which is given in countries where insurance plans are in operation.

"May I close by quoting a line from Shakespeare, which seems pertinent: 'Seeking to better, oft we mar what's well.'"

Such an indictment of the panel system, coming as it does from one who has first-hand knowledge, should be given the widest publicity.

THE LAY PRESS AND THE PHYSICIAN

Charlotte Johnson, staff writer for the Atlantic City *Press*, takes us to task in a most clever manner when she discusses the relation of the press to the medical profession. Her opening statement quotes Myron Weiss, associate editor of *Time* Magazine, who says that "medicine has not done right by the press," and further quotations from Mr. Weiss provide the text of her interesting discourse. She says that, in rebuttal, the medical profession answers that the press, as doled out today,

is badly in need of a doctor. So far, honors are even!

Mr. Weiss declares that science editors in general are impatient with doctors. "They work very hard to get what is laid before them, but they find it very hard to get anything beyond that point. Due to that situation, as well as five other causes, the medical profession has, without any question of a doubt, *the worst press connections of any other profession in the country* (our italics), which they have in spite of the good will of the press in general. When any doctor, in any part of the country, says something he can get it into the papers and magazines."

The article goes on to state that the medical profession must have the good will of the press, to which we most heartily agree. But, Mr. Weiss continues, as the press becomes more and more informed as to what is going on in medical circles, "including the bickerings that go on inside the temple," it is then that the press gets most impatient. Then comes a most heretic statement that the press "does not accept the pronouncements, the by-laws, constitution and medical ethics of the American Medical Association, which virtually forbid a doctor consorting with the press." If, he says, some physician defies the authorities, "then he runs the risk of being excommunicated from the priesthood of general medicine, and has great difficulty in using a hospital and in getting other doctors to consult with him."

At the risk of being accused of too many quotations, we will add one more, since it is so meaty: "Medicine today, more than it has ever needed it in the past thirty years, needs both a sympathetic public and an unobstructive press. . . . The most willing agency for this end (that of maintaining our present status) is the American press, as represented by newspaper and magazine."

To us, this is the most enlightening article that we have seen in some time; it clearly sets forth the fact that we have, right at our front door, the greatest ally that can be aligned with us. For many years we have discussed this very problem with newspaper and magazine folks, practically all of whom have expressed the opinion that if the medical profession would but meet the press half way the latter would be glad to ride with us. True it is that for the past few years we have made a few friendly overtures to these people, but, in our opinion, we have not gone the limit to make an alliance such as would be eminently worth while. There can be no question but that the press remains the greatest factor of reliable publicity. For a time it seemed that the radio might assume this rôle, but those gentry have gone too far and the public is becoming well acquainted with the fact that much that is spoken over the air is more than tinged with a spirit of rank commercialism. Even some of our great broadcasting systems recognize this truth and have even now begun to trim their sails accordingly.

No, we do not mean that we should rush to the newspapers with advertising, telling the wide world that we are prepared to remedy this or that ill. Rather we should engage on a dignified campaign, not of propaganda, but a campaign such as will educate the reading public to the fact that the medical profession is not only going places, but it is still mindful of the health interests of our citizens. We sometimes wonder if that honorable but ancient document, our code, might not stand just a bit of revision?

At any rate, as we have pointed out, the way seems open; the offer is before us; what shall we do about it?

EDITORIAL NOTES

THE President's Page is omitted this month. Dr. Leach is recovering from an illness and, at our suggestion, he will take a vacation during the summer months so far as his JOURNAL duties are concerned.

THE height of something or other was reached a few days ago when we overheard a Christian Scientist lamenting the fact that a Mickey Mouse film depicting a comic cyclone should ever be shown, because of the pernicious influence of the "destructive ideas" which were permeated through the cavortings of Walt Disney's hand-made cyclone!

DR. WILLIAM N. WISHARD has called attention to a note in the April 1935 issue of the *Journal of Medicine* (Cincinnati) which is worth reprinting and is as follows: "Dr. Fred C. Zapffe, secretary of the Association of American Medical Colleges, based upon an elaborate, exhaustive study of the records in seventy-five medical schools says: 'On the whole, then, one is tempted to say emphatically that the best preparation for the study of medicine is the pursuit of studies leading to the A. B. degree—more culture, less science.'"

OF late we have noted, in various journals, several articles having to do with the management of chemical burns of the eye. Many of these articles fail even to mention a treatment that has been of the greatest service in the hands of those who use it, and we refer to the use of a ten per cent solution of neutral ammonium tartrate, in cases of lime burns. We have had considerable experience with this form of treatment and have had uniformly good results. This treatment was suggested

by Dr. Hans Barkan, of San Francisco, in an article in *The Journal of the American Medical Association* some five years ago. The solution is quite permanent and should be at hand in the office of every physician.

JUNE sixteenth is the official opening date of the fishing season in Indiana, and we presume that those of our number who are more or less ardent disciples of Izaak Walton have ere this taken a fling at their favorite sport. No, while we like to fish and while we have spent no little time in the sport, we did not take advantage of the opening date, for the very good reason that the "moon was not right!" Believe it or not, far fewer fish are caught in the light of the moon than in the opposite period. As a matter of fact, we have for years planned all our fishing trips to take advantage of the dark of the moon. We may be taken to task for this, but for "nigh onto forty years" we have observed the custom and have seldom been disappointed in the size of our bags.

A few days ago we received a letter from the manufacturer of a highly advertised patent medicine, a laxative. The letter went on to extoll the merits of the preparation and advised that in due time we would receive a box of samples for distribution to our patients. The samples duly arrived, but as yet they have not been distributed. This is the first example we have had of patent medicine manufacturers exploiting their wares to the medical profession, and the best part of this is that the letter was addressed to the Editor of THE JOURNAL! The chances are that if a general distribution of these samples was made, a considerable group of physicians accepted the advice of the advertisers and proceeded to hand out the samples.

A MEMBER of the Indiana State Medical Association had the misfortune to become involved in a malpractice suit which terminated in his favor only a short time ago. In commenting upon it, the physician wrote the following to the headquarters office: "It is needless to relate to you how thoroughly and efficiently the case was handled. It is just too bad that the members of the state association do not realize what protection is afforded by membership in the association and what high class legal ability is at their disposal. I desire to express to the committee, who has charge of the legal defense, my sincere appreciation of the service rendered in my one malpractice suit in thirty years of practice." This is evidence of the value of your membership to you. You cannot know when such an experience may be yours.

WE HAVE most assiduously checked the current medical press to find some expression of regret over the retirement of Mr. John H. Kingsbury as executive secretary of the Milbank Fund. To date our search has been fruitless, which pleases us much. Mr. Kingsbury some time ago gave his hearty approval to socialized medicine, and after a sojourn of some six weeks in the Soviet Union, joined with Sir John Newsholme in writing a book, "Red Medicine," in which a similar state of affairs was advocated for this country. It should not be forgotten that Kingsbury is the chap who made the almost infamous statement that Indiana had abandoned her State Board of Health, and that statement was given wide circulation in the public press. We congratulate the Milbank Foundation on having detached this man from his job, and we trust that his successor will be more willing to cooperate with the medical profession.

IT SEEMS almost ridiculous to mention the chain letter nuisance at this late date, but we have just had called to our attention a scheme for which some physicians might fall because of the names appearing on it. It is a ten-dollar chain letter and the names used are names of state association secretaries and presidents. The secretary's name heads the list and that letter is sent to the medical association president. The "catch" (always present) in this one is that the third and fourth names on the list are not M. D.'s and probably are the names of those who have started this chain. With such a list of reputable gentlemen supposedly sponsoring the chain, some physicians might be tempted to part with ten hard-earned dollars, but we hope and believe that the replies from Indiana will be few. At any rate we have asked the postal authorities to investigate the letter that was turned in to us by an Indiana physician. We believe that this racket has gone far enough.

Bismuth Injections for Warts. One or a few warts readily yield to cauterization or excision, but what of generalized verrucosis? Some observers have claimed that such warts are infectious and seem to be due to a filterable virus. Others suggest an allergic origin.

We have observed an encouraging report upon the use of bismuth salicylate intramuscularly in such cases. One or two grains, according to age, injected a week apart for two to nine weeks have caused regression in all of a series of about fifty cases. Subsequent injections two or three weeks apart were used in obstinate cases—all with cure.

In view of the fact that warts have been known to disappear after some form of psychotherapy, such as sterile water injections, we may rightfully be skeptical of the actual scientific basis for these claims. Nevertheless, it warrants further trial.—Editorial *Colorado Medicine*, June, 1935.

EVERY little while we come across an article in some medical publication bemoaning the fact that this or that state's bonded indebtedness is increasing by leaps and bounds; that, if it is ever paid, it will have to be done by future generations, almost without end. When we read such articles or when we hear the matter discussed we inwardly thank those wise heads who drew into form and enacted the Constitution of the Sovereign State of Indiana (apologies to Romberger). Strange to say, there are many, many Hoosiers who do not know that Indiana has no bonded debt, nor do they know that bonds cannot legally be issued by the State of Indiana. In fact, we have met more than one individual who, after having been elected to the Indiana legislature, has discussed measures he is thinking of proposing, and declares that he will ask a bond issue to finance the project. Our tax rate may be a little burdensome, but we may enjoy a little extra contentment over the fact that we have no state debt.

WITH the opening of the bathing season we may expect the usual increase in cases of ringworm of the feet, though of course bathing beaches and bath houses are not the only source of the infection. Discussing this subject, Dr. J. A. Colclough[1] gives the following suggestions for the management of this troublesome infection: We know that the infecting agent is a mold and that it thrives on moisture, warmth and darkness, each of which is of course met in the feet. The writer advises daily washing of the feet, thoroughly drying the infected areas, then swabbing with alcohol, followed by ether. He states that this treatment, alone, is successful in most of his cases. He also recommends swabbing with a saturated solution of salicylic acid in alcohol, followed by a dusting powder. He is of the opinion that Whitfield's ointment is of benefit only in mild cases. In the more serious infections he has used ultraviolet radiation, five minutes at twenty inches, with the greatest of success.

DR. M. REESE GUTTMAN has presented a valuable paper on the "Modern Conception of Cancer of the Larynx" in the December, 1934, issue of the *Illinois Medical Journal*. Concerning its cause Dr. Guttman says in part: "It is strange to note that only a few of our patients pursued any vocation that might lead to vocal abuse . . . singers, hucksters, lawyers, public speakers and the like, were conspicuous by their absence. Smoking apparently did not play an important role, as many nonsmokers, including several women . . . were victims of this affliction. Addiction to drink was acknowledged by only a few. Heredity . . . apparently played a minor role in our series of cases. . . . The statement that carcinoma of the larynx occurs in older individuals requires qualification. Early middle life and even the late twenties are not immune. Cases have even been recorded in young people, mainly women of fifteen, sixteen and eighteen years of age."

In this connection it will be well to emphasize again the often repeated advice which the society has offered. Persistent hoarseness is to be viewed with suspicion and demands careful examination by the medical profession in order to obtain assurance that cancer is not involved. The burden of recognizing the persistence of hoarseness, of reporting for examination and of insisting that complete examination be made rests with the person afflicted.—*Bulletin*, American Society for the Control of Cancer, February, 1935.

AS IS generally known, Indiana now has a new liquor control law; of late years (that is before prohibition), Indiana did quite a bit of experimenting with liquor control. We recall the days of the Nicholson Law, hailed as the final solution of a most vexing problem, but the problem was not solved. Then we had Local Option, a law many of our younger folks know little about; this, too, failed to be the hoped-for panacea. Then came the inevitable, the "dry state," preceding national prohibition by a few years. National prohibition, without any discussion of the reasons why, was an abject failure; as a "noble experiment," it became ignoble; it met its inevitable, though long delayed, fate. With the coming of repeal, the states were hard pressed to solve the question, and the 1935 Indiana General Assembly gave us a liquor law. We have made a rather exhaustive study of the more than 140 pages of text covered by this new law, and we are inclined to believe that it is good; while it fails to cover some points that we believe to be essentials, yet on the whole it is a good law, well written and with adequate protection for the citizenry of Indiana. Its enforcement is another problem, but we believe this will be fairly well accomplished. In some quarters it is to be expected that there will be some degree of falling down with enforcement, but the law provides for what may be termed as "state control" which, if kept reasonably free from politics, assures a degree of control such as will meet with the approval of the majority of our citizens. Indiana has voted for the sale of alcoholic beverages; now it is up to us to make the best of it, regardless of our wet or dry opinions.

THE New York *Times* for June sixteenth publishes an editorial relating to the Atlantic City session of the American Medical Association. The point of view is interesting. The writer says that such scientific conventions are useful because they serve to summarize the important developments and to appraise them. "The proceedings of the

[1] Colclough, J. A. Surgical Complications of Ringworm of the Feet. *New Orleans Med. and Surg. Jrnl.*, June 1935.

American Medical Association are especially valuable because of a certain Bourbonism, which is called 'medical ethics' and which makes it impossible for a physician, without risking ostracism, to give newspaper interviews on his researches even though accuracy of statement is insured. At Atlantic City the bars were lowered. Thanks to an excellent press bureau and to the conscientious reporters who attended the meeting, names were named without the usual consequences and the public was able to review the extraordinary progress that has been made in conquering disease and prolonging life." Another paragraph signifies that the public is becoming educated to the fact that remedies of the past are doomed and mentions the disappearance of such instructions as "shake well before using" and "one teaspoonful every hour," and that the vitamins, hormones, and mechanical and electrical methods are growing in importance. Then the editorial writer has a little fault to find—he believes that physicians are too inclined to be medical engineers, "dealing with living mechanisms rather than with delicately balanced minds," and suggests that souls must be treated as well as livers and hearts. Has not this always been a part of the physician's work? Last of all, the writer mentions the social aspects of medicine, and notes that a subject once relegated to a small committee is now vital to every member of the profession, and, "With medicine clearly becoming one of the more important social sciences, the Association must attune itself to community sentiment and yet avoid the evils that attend mass service of the sick. Here we touch a subject which is socially of as much importance as any work done in the laboratories."

DR. H. H. SHOULDERS, militant editor of the *Tennessee State Medical Journal* and newly-elected vice-speaker of the House of Delegates of the American Medical Association, expresses a great deal of truth in a few words when he speaks of one phase of economics in his home state. There is so much meat in these observations that they are reproduced, for the suggestions offered well apply to Indiana or any other state:

"The following calculations serve to show some of the benefits which might be achieved with a different system of administering prophylactic agents to the indigent population of the state. The estimate here made as to the number of indigents is arbitrary, of course. There are no accurate figures on which to base a sound conclusion.

"There are approximately fifty thousand living children born in the state each year. We will assume that fifty per cent are indigent. If the state were to pay to the doctors who attend the births of the twenty-five thousand indigent children the sum of three dollars for the administration of diphtheria toxoid before the infant is six months old, the cost to the state would amount to $75,000 per year. The birth certificates would serve as the basis for a checkup.

"A few of the benefits of such a plan might be enumerated as follows:

"First, the infants would receive the treatment at a time when they actually need it.

"Second, the doctor would keep in contact with the child.

"Third, with fifty per cent of the infants immunized each year a diphtheria epidemic could never occur.

"Fourth, the doctor would receive at least some remuneration.

"The communities would be using the facilities at their very door. The doctors in rural communities would be encouraged at least to remain and to take a keener interest in the matter of prophylactic agents. A tremendous economy would be effected."

SPEAKING of prosperity letters, here is the latest and the best that your editor has seen. Dr. M. A. Austin of Anderson has scored another "hit" by including the following with his regular medical society meeting announcement:

PROSPERITY LETTER

BROTHER, CAN'T YOU SPARE A DIME? IF SO, SEND IT TO ————, FOR THESE SUGGESTIONS TO INCREASE YOUR GREATNESS

1. As you enter a home, flop down in a chair as if completely exhausted and when you can rally enough to talk tell them how nearly you have been worked to death, and don't fail to say you don't see how you can stand it much longer.

2. Send birthday greetings to all your babies and once in a while visit some child on its birthday. Have your office girl hand you a slip of the day's blessed events and make the most of your possibilities. This will convince anybody that while you may have no sense of business you are just one of those natural born doctors.

3. Do no abortions whatever, except under unusual circumstances, and then control the circumstances.

4. Make extra visits to well selected homes, and if by chance you can stop in the middle of the night they will be sure you can't sleep for thinking of them. Make no charge for such calls if husband is not home.

5. Criticise no other practitioner. On the other hand never refer favorably to one, but, if in a pinch you must, raise one shoulder or eyebrow just a mite as you commit the deed.

6. In cities under forty thousand a sloppy office generally impresses people favorably. It is evidence you don't have time to keep things in their places. It is also one of the signs of a genius.

7. Never express an opinion that could possibly differ with your patient's. If he is a socialist,

criticise the government. If he is a communist, offer him encouragement. This civilization isn't worth saving anyhow.

8. Change your patient's diet irrespective of what ails him. If you have no originality and they want plebian diet like meat and taters, have it cooked in some strange way. This goes big with the superintelligentia, and the more super the more they are impressed. Remember, absolutely no salt.

9. Give no medicine per any of the orums. This is an antiquated practice followed by no modern practitioner. Inject all remedies sub or intra or bake them in with a new kind of light just discovered.

10. Never carry a medicine bag. This is the insignia of the lowest type of medical backwardness.

DR. JOHN R. FRANK of Valparaiso recently wrote a little article on refraction, for lay consumption. It presents in plain terms some truths that may well be read by physicians; hence it is presented herewith:

The eye is, by common consent, the most important and the most precious of all our special sense organs. We "visit the dentist twice a year," for the inspection and care of our teeth, but how many of us have our eyes checked or examined even once a year? Unlike the teeth, the eyesight, once lost, is rarely regained and never replaced.

Common symptoms indicating the need of glasses or a change of correction are poor vision, pain, itchy or strained feeling in the eyes, frontal headaches, and sleepiness soon after beginning to read. Less common signs are styes and inflammations of lids or conjunctiva, nausea, and vomiting. One may be able to read the normal line at twenty feet and still be in need of glasses. Do you know why?

Upon going to a physician's office for examination to account for symptoms, you will note that after taking your vision and examining the nose and throat for causes of symptoms he will usually insist on using some kind of "drops." Now why are these drops which dilate the pupil so necessary in order to get the exact correction for optical errors?

First, "drops" not only temporarily dilate the pupil, thus allowing a thorough examination of the interior of the eye, but they fix and put at rest the focusing power of the eye, for a time. Drops are to the eye what a splint is to a broken arm, and in the hands of a competent physician they never do any harm. With the pupil thus dilated, the physician can then *objectively* and thoroughly examine or "refract" the eye for its refractive errors. It is not necessary to ask the patient a single question during this part of the examination which is called retinoscopy.

A *subjective examination* is next done, in which the patient tells what lenses give him the best vision. Having the accommodation fixed also aids the patient to tell or determine the finer points of the examination.

The use of drops in the examination of children is especially important for a child's answers to questions as to what he sees are very unreliable, and because children have much more power of accommodation than adults. In Germany those who grind lenses are forbidden by law to fill prescriptions for children's glasses unless the order is written by an M.D., or an eye physician. Some opticians in our country grind lenses only upon the order of a physician.

Another decided and often financial advantage in the use of "drops" lies in the fact that an oculist, by getting the accommodation relaxed with drops, is enabled to get the full and exact correction of the refractive errors of the eye. He can then write the correct prescription the first time; without the use of drops, the far-sighted eyes of children, especially, are under-corrected, and the result is necessity for frequent changes in the lenses.

Osteopathy in Great Britain: Basic Laws in America. Physicians who feel any uncertainty as to the claims of osteopathy would do well to study recent issues of the *Lancet* and the *British Medical Journal*. The British House of Lords has recently had under consideration a bill for the registration and regulation of osteopaths, and a committee appointed by the Council of the British Medical Association has drawn up a memorandum on the subject.

Osteopathy came into existence because of the speculative and utterly unscientific thinking of A. T. Still, who denied the existence of such disease entities as diphtheria, typhus, or typhoid, and regarded all so-called diseases as simply manifestations of obstruction in arteries or veins. As an example of the osteopathic point of view, one osteopathic "authority" has related malaria to a "lateral deviation between the ninth and tenth dorsal vertebrae and a consequent downward displacement of the tenth rib."

It is obvious that in the United States and elsewhere osteopaths have long since retreated from the original contention that every disorder of the human body could be successfully treated by manipulation of the bony framework. Pure osteopathic faith was a denial of the whole structure of modern scientific medicine. But the osteopathy of today is a combination of Still's teachings with a willingness to resort to any of the accomplishments of scientific medicine with which the osteopath happens to be acquainted and is not forbidden by law to practice.

An attempt to legalize the practice of osteopathy in the Province of Ontario, Canada, is the basis of an address by Frederick Etherington, appearing at page 1549 of the *Journal of the American Medical Association* for April 27, 1935. Ethering-

ton, representing the medical licensing body of Ontario, reveals important details as to the utterly inadequate character of the attempted training in scientific medicine at several osteopathic colleges, including the large institution at Kirksville, Missouri, founded by Still himself.

The May 11, 1935, issue of the *J.A.M.A.* editorially comments upon the above mentioned attempt to obtain state recognition for osteopathy in Great Britain. Such activity came "to an ignominious conclusion," according to the *London Lancet*, and the bill has been withdrawn. The withdrawal is claimed to hinge upon whether osteopathy stands upon any scientific basis—the proponents of the bill having failed to show any scientific body wherein osteopathic conception of etiology and pathology is recognized. Yet their art and practice purport efficacy in the whole field of medicine.

We conclude this comment with the same thought brought in the *J.A.M.A.*, namely, the necessity of establishing Basic Science Laws in every state in the Union. There must eventually be a minimum standard of education for all who propose to treat the sick. Some states now have such laws, but the majority, including our own, have thus far failed in their enactment. We came closer to it than ever in the last session of the legislature and will finally succeed. Do not fail to talk Basic Science Law to your legislators from now on. Popularize this constructive and protective legislation in every possible way repeatedly. Remember it is the keynote of our legislative ambitions!—Editorial, *Colorado Medicine*, June, 1935.

Why Physicians are Rated Higher than Senators. The United States would be a nation of physicians if everyone was able to engage in the occupation for which he has the highest regard, according to a survey conducted recently by Dr. George W. Hartmann, professor of educational psychology at the Pennsylvania State College. Dr. Hartmann found that the physician outranks even the United States Senator in social prestige today.

Personally interviewing 450 persons representing every walk of life, Dr. Hartmann gave each a set of from 12 to 25 cards, on which were listed various representative occupations, and asked each to arrange the cards in the order of his respect and admiration for the occupation listed on the card. In every case, no matter what the occupation of the person making the judgment, the physician was placed first.

Unemployed persons on relief rolls, farmers, coal miners, college and high school students, school teachers, bankers, lawyers, truck drivers, factory workers and others in various occupations were included in the group interviewed. Persons were interviewed in nine different communities, ranging from the little farming community of Centre Hall, Pa., which has a population of approximately 600, to cities such as Bethlehem, Pa., with a population of 57,000, and Altoona, Pa., having a population of 82,000.

The survey revealed that apparently each vocation has a pretty good idea as to where it stands with reference to other walks of life, persons engaged in an occupation rating it at about the same position in the social scale as do disinterested judges.

Twenty-five persons in Bethlehem and Nazareth, Pa., the latter a community of 6,000 population, ranked twelve occupations as follows: physician, U. S. Senator, college professor, lawyer, high school teacher, grade school teacher, factory worker, merchant, letter carrier, garage mechanic, salesman, and bricklayer.

Two other groups, one of forty-two in Mt. Union, Pa., and the other of fifty living in Centre Hall and Pleasant Gap, Pa., revealed the following preferences: physician, senator, lawyer, college professor, dentist, clergyman, high school teacher, factory superintendent, merchant, grade school teacher, salesman, nurse, actor, mail carrier, garageman, tailor, bricklayer, baker, policeman, plumber, miner, barber, cook, and fisherman.

Still another group of 100 persons living in Altoona, Tyrone, and Port Matilda, Pa., placed the physician first in their admiration and respect, followed by the lawyer, college professor, school superintendent, clergyman, school principal, high school teacher, government employe, elementary school teacher, electrician, machinist, bookkeeper, farmer, carpenter, baker, store clerk, policeman, chef, barber, truck driver, laborer, janitor, messenger, night watchman, and bootblack.

Representatives of twelve occupations in the Wilkes-Barre, Pa., district rated their occupations in virtually the same order as did disinterested persons.

Dr. Hartmann believes that historical and geographical relativity is important in any social prestige ranking of occupations, pointing out that the social standing of bankers altered considerably in the United States between 1929 and 1933.

It is easy to understand why doctors stand first in respect and public admiration. The medical profession is made up of a fine body of men who work hard, are conscientious, have long hours, make many sacrifices, and give much time to charity. But it is hard to see why the United States Senate should stand high in public estimation. Many senators are professional politicians of no great ability or wisdom, whose records show they have approved all sorts of half-baked laws and schemes to grab money from the treasury. Respect for the lawyer probably comes down from earlier days when he was a man of extraordinary repute in the community, but, like the discredited banker, many lawyers no longer hold the confidence and respect of their townsfolk.—(Copyright 1935, by *American Weekly*, Inc. Great Britain rights reserved. Reprinted from *Chicago Herald-Examiner* March 31, 1935, with permission of *American Weekly*, Inc.)

THE ATLANTIC CITY SESSION OF THE AMERICAN MEDICAL ASSOCIATION
June 10 to 14, 1935

By H. G. HAMER, M. D.
Indiana Member House of Delegates

THE A. M. A. FAVORS ONLY VOLUNTARY PLANS OF HEALTH INSURANCE VARIED TO SUIT THE NEEDS OF EACH COMMUNITY

The House of Delegates of the American Medical Association at the eighty-sixth annual session reiterated its stand opposing national and state legislation which would impose a general plan for sickness insurance on the people of the country, holding that no universal plan can be devised to meet conditions as they are throughout the United States or even within different sections of individual states, declaring that the "responsibility for carrying out a public health program is the duty of organized medicine, which is the only group qualified by training and experience to administer such a service so as to fully safeguard the public interest."

The principle of voluntary health insurance for the provision of medical care to all classes of people, provided each locality works out its plan in accordance with its own conditions, was officially endorsed. At the same time the Association reaffirmed its traditional opposition to any form of compulsory health insurance, local, state, or federal, and declared itself equally opposed to any one all-embracing health security plan for the entire nation. Any community plan, it was held, should operate under the supervision of organized medicine with the cooperation of local agencies.

SPECIAL REPORT ADOPTED

The House of Delegates adopted the report of the Bureau of Medical Economics which during the last year has made a study of more than two hundred health plans, either proposed or in operation, worked out by a group of state and county medical societies throughout the country.

These societies are convinced, the report declares, "that medical care for a community can be made available without state control and that American medicine need not follow the pattern of foreign sickness insurance schemes and practices."

In nearly every country having sickness insurance, local conditions have forced modifications of the general plan. Whether the "plan" is one imposed by legislation, or one devised and operated on standards set voluntarily by the medical profession, a single universal or master plan cannot possibly be devised to meet all the varying conditions throughout the United States, or even different sections of individual states.

"The profession needs, and will always welcome, the cooperation and advice of all elements affected in health problems, but just as the individual physician must constantly assume the tremendous responsibility of decisions that involve life and death with individual patients, so the profession as a whole must assume the leadership and responsibility in the organization of medical service in the community."

In the special report on health security, the existing medical plans, operating and proposed, were classified tentatively under eight general groups as follows:

1. Special fee schedule for low income groups and those temporarily unemployed.
2. Medical care for the indigent by contract or agreement with proper officials of the political subdivision. These contracts call for either a specified sum paid quarterly or annually; special fee schedule; or a per capita fee based on periodic adjustment of indigent load.
3. Minimum guarantee to physicians in communities not otherwise able to have resident physicians. This group includes a part-time health officer; general medical service, including care of indigent, and combined curative and preventive medicine supplemented by regular medical fees.
4. Voluntary budgeting for medical care, with either prepayment or postpayment for medical care, the prepayment type to be organized for industrial groups only, or for all persons below a stated annual income.
5. Voluntary budgeting for hospital care, with prepayment for hospital facilities only.
6. Special services or procedures, by cooperation with health departments or other agencies.
7. Regulation of hospital clinic and dispensary admissions and routing of hospital traffic.
8. Industrial group service.

"Proper adjustment of medical charges according to ability to pay depends on as exact knowledge as is possible of the incomes of those to be served."

METHODS OF PAYMENT

In discussing methods of collecting payment for medical care the report said:

"There is nothing inherently good or bad, from the medical point of view, in different methods of collection. Insurance, taxation, budgeting, advance financing and all other methods are nothing more than tools with which to conduct an economic transaction. The problem is to select the best method for every purpose.

"It is important that all matters concerning medical services should be controlled by organized medicine. It is also essential to maintain the principle of free choice of physician.

"Essentially the task before the medical profession involves the old problem of furnishing one grade of medical service to all classes, some of which have incomes too low to permit them to pay the cost of such services. This problem is as old as the medical profession. The only solution that has ever been suggested is the sliding fee scale."

MORE RIGID ETHICS

Dr. George Edward Follansbee, of Cleveland, chairman of the Judicial Council of the Association, suggested that a new plan for enforcement of medical ethics be enacted.

The Council recommended that a judicial procedure, similar in nature to the courts of law, be established to pass on alleged violations of the code of ethics, with disciplined individuals being given the right to appeal through a series of higher courts.

State societies would be empowered to initiate proceedings against physicians violating the code under a probable change in the Association's constitution, and hospitals would be required to abide by it as a pre-requisite to approval.

Isolated cases now exist in which the code of ethics is not followed, the report stated, the delinquents including "individuals, certain groups and a few institutions." "The violations include," it added, "solicitation of patients, particularly in industrial practice; unfair competition of clinics and groups; unethical and unlawful practice of medicine by hospitals, dispensaries, insurance companies and universities."

The code remains the professional law of all members of the Association in hospitals, universities or clinics, the report declared, but such institutions are not always subject to it. They recommended that a plan be formulated "whereby all those associated in the delivery of medical service be included in the investigation of hospitals for classification and that approval be based in the future upon the ethical practices of the institution as well as its scientific work."

RADIO ADVERTISING ASSAILED

Resolutions approved included one submitted from Texas urging that the A. M. A. protest to the Federal Communications Commission, and through it to the Mexican Government, against the broadcasting of fake medical advice, particularly cures for cancer, and advertising of health devices from stations located in Mexico.

The House voted to request the Federal Communications Commission to seek a correction of present or future radio broadcasting of "matter which is untrue or dangerous or both as it pertains to public health."

A resolution was introduced suggesting that the Association attempt to secure enactment of state laws regulating the use of the term "doctor" in advertising of products which no physician or society had approved. It was pointed out that many such advertisements carry the recommendations of chiropractors and others with the inference that they are physicians.

BIRTH CONTROL ACTION

From six state medical associations came resolutions objecting to present or contemplated laws on the subject. The state resolutions contended that laws prohibiting the use of birth control methods, restrict, inhibit and in some cases make illegal, sound and ethical medical practice.

The official resolution declared that "under the stimulus of large non-medical groups the general use of contraceptives is being advocated and encouraged despite the existing law, not only by the above mentioned groups but by commercial interests as well."

"Under the present situation," it added, "the ultimate effect of these measures is unknown if not questionable and should accurately and extensively be studied by the medical profession in whose care the health of the people rests."

The resolution also declared that federal and state laws regulating birth control advice which a physician may give to individual patients as therapeutic measures is "complicated and not well understood," and interpretations of those measures "are generally unsatisfactory."

A special committee of investigation will be appointed by the Board of Trustees to study the subject from a medical standpoint.

Regardless of how much they differ among themselves over present methods of birth control, physicians want no legislative interference with their right to advise patients on whether to use it or not.

All, however, were united in the attitude that federal and state laws attempting to regulate the giving of information on contraception by doctors to their patients are based on a false premise. The doctor alone, in prescribing for an individual patient, is able to say whether birth control is necessary, and no law can establish a justifiable rule.

The question has been before the House of Delegates for the past four years but no action has been taken until the present.

MISCELLANEOUS

An event of especial satisfaction was the report of the chairman of the Committee on Legislative Activities to the House of Delegates, that following a conference with the chairman of the Board of Regents of the American College of Surgeons, the latter declared that the activities of the College of Surgeons would be confined to affairs of a scientific character. The chairman of the Board of Regents agreed to write a letter to the President of the United States stating that the American College of Surgeons does not differ in sentiment from the American Medical Association;

(Continued on page 360)

CARE OF THE DROWNING PATIENT

LEWIS C. ROBBINS, M. D.
INDIANAPOLIS

The care of a drowning patient is very clear cut. Though a great many men have written on the subject, they are all in fair accord: the patient needs heat, shock position, and oxygen, and the greatest need is oxygen.

OXYGEN. Drowning is one of the greatest emergencies in medicine. Many victims are beyond help after five or six minutes of the asphyxia due to submersion. Although there are reports of revivals after twenty or even thirty minutes of asphyxia, the top limit seems to be twelve to fifteen minutes. This means that the patient suffering from apparent drowning is in a state of extreme emergency and the asphyxia must be relieved immediately. There is no time to send for help. Those on the scene must begin artificial respiration. We can not overstate it when we say that *seconds count!*

Many methods of artificial respiration have been suggested. Individuals and organizations, however, are nearly unanimous in their recommendation of the prone pressure method. This is a modification of the Schafer maneuver advocated in 1907. It is efficient, simple to perform, and when properly applied, never injures a patient.

HEAT. Many victims of submersion die, not of asphyxia primarily, but of cold. They are in no small degree of shock and the cold ground, the wind hastening evaporation of the wet clothing, and the poor circulation all contribute to a dangerous loss of body heat. So of great importance in the supplementary treatment of drowning is the application of heat.

POSITION. Three things are required of the position in which we give artificial respiration. The tongue must fall forward so that the air-way is not blocked. The drainage of water from the lungs must be facilitated. And, lastly, the circulation must be aided by the shock position: the body on an incline with the head downhill. The prone pressure position favors all three requirements.

PRONE PRESSURE PROCEDURE

At the nearest possible place lay the patient on his belly, one arm extended directly overhead and the other bent at the elbow and with the face turned outward and resting on the hand, so that the nose and mouth are free for breathing. If there is a slope, as on a beach, place the patient with the head downhill. Quickly run the finger into the throat for any obstructions, such as mud, weeds, chewing gum, etc.

Now kneel, straddling one thigh, preferably that on the side to which the face is turned, and clench knee and ankle with your knees and feet. Place the hands on the small of the back, fingers together, so that the heel of the hand rests in the depression between the last rib and the top of the hip bone. The fingers curve naturally around the sides, their tips just out of sight. The wrists should be about four inches apart. Thus pressure is applied to the lower ribs. If the hands are too high, pressure will be supplied to ribs attached in front, and they may be broken.

Now the cycle: With elbows straight, swing forward slowly so that the weight of your body is gradually brought to bear upon the patient. The shoulder should be directly over the heel of the hand at the end of the forward swing. Thus we produce an active expiration.

Next, a snap-off. Bring the wrists laterally, swinging back at the same time to regain the balance. This snap-off employs the elastic rebound of the thoracic box to allow a maximum inspiration.

Sit back on the heels to allow air to enter the patient's lungs and also to rest yourself. Repeat this cycle, allowing four to five seconds for each respiration, twelve to fifteen times during each minute.

We use a mnemonic in teaching laymen. The initials of the words, "Place! Rise! Over! Now off! Ease!" spell "Prone," the name of the system. These words describe fairly accurately the procedure, and so aid the operator.

SUPPLEMENTARY TREATMENT

When artificial respiration is begun, and not until, the supplementary treatment may be instituted. During the application of the resuscitation let nothing interfere with the rhythmic execution of the prone pressure.

HEAT. Retain the body heat by means of a blanket over and under the patient. Supply heat with hot water bottles, hot bricks, or glass bottles filled with hot water. Take care that the patient isn't burned!

WATER IN THE LUNGS. As drowning progresses some water may be inhaled. This produces, with mucus, a tenacious froth that hinders attempts at resuscitation. No special maneuver will remove this fluid. A part of this is absorbed by the circulation and some is forced out by long continued artificial respiration.

CLEAR AIR-WAY. It is self-evident that if there is a blocked air-way, prone pressure is worthless. A

(Continued on page xxi)

MEETING TODAY'S CHALLENGE

BY L. B. McCRACKEN, MANAGER, MEDICAL AND DENTAL BUSINESS BUREAU OF INDIANAPOLIS

(Last month a brief outline was given of the Medical Service Plan now in operation by the Indianapolis Medical Society. This article deals with the conditions and steps leading up to the adoption of the plan. Future articles will give details and specific incidents in its operation.)

When grandpa needed a doctor he probably went after him on horseback. It was an event. There was fear and trembling. The physician was paid promptly in maple syrup, a load of wood, or a quarter of beef. Grandpa expected little. He paid for value received.

When his grandson today needs a doctor the circumstances are entirely different. All known resources of medical science are expected to focus their concern upon his particular and personal case. Care and attention should descend upon him as a dispensation from heaven. He expects much. He loses no sleep from worry over the payment for value received.

Compare yesterday with today and wonder! Who knows anything about tomorrow? Can we ignore this day of change and adjustment by denying its existence? Is it time to bury some of our traditions and customs of the past and evolve out of the surging conditions of modern life a better economic system? It is no easy task to make changes today. Yet every day's delay only adds to a problem which must be faced eventually.

Public interest in questions of health and the cost of medical care has probably never been keener than at present. In the general anxiety and overindulgence in providing for the destitute, criticism often falls heavily upon the physician. Doctors are used to being misinterpreted and with their endless duties have been too busy to come to their own defense.

What are some of the conditions faced by the doctors today? Surely, compared to benefits derived from medical care, the cost at the present level of prices is not too high. Has he been too busily engaged in improving and modernizing the practice of medicine to be conscious of the equally remarkable revolution in finance and credit? After years of diligent service does his estate consist of a monument of promises dedicated to him by nonpaying and unappreciative patients? Has he not been too severely penalized for his leniency?

No matter what view may be taken of the medical profession, the individual who has spent the necessary time and money in preparation for his range of training in the medical field has done so in order that he might be fitted to earn a livelihood for himself and family. The doctor is rightfully regarded as a public servant whose time and skill belong to the people, yet his income is derived from those whom he serves, who are able and see fit to pay him. How can he reduce losses on unpaid accounts?

The necessary steps, the "ounce of prevention," must be taken far in advance of the default in payment. The rendering of professional service, with specific regard to payment therefor, falls into two classes: PREVENTIVE and REMEDIAL.

Preventive steps to curtail losses are like sanitative and hygienic measures. They must be performed in advance and made a matter of routine and habit.

Remedial measures are few. Lack of preventive steps has permitted delinquent accounts to ferment into a bewildering mass of names, addresses, and amounts. The amount which patients owe staggers them when it is considered in a lump sum. They can't pay it all at once and they are ashamed to pay only a small fraction. By procrastination they finally abandon all hope of ever doing anything about it and consequently another stone is built into the monument of promises. What has caused this proverbial neglect of medical bills?

What the general public needs is *intelligent credit, scientifically determined and properly granted.* The public asks or expects to be told what they must pay for anything purchased. Why should there be any exception in a doctor's office? Certainly the individuals who seek professional service have not considered it unethical to come to definite terms before the case is undertaken. The use of a credit and accounting department does not necessarily change the practice of medicine from a profession into a business. A patient will seldom question his own judgment and the fee would be satisfactory if understood and agreed upon in advance.

All of these facts were freely discussed by progressive members of the Indianapolis Medical Society in the spring of 1934. They realized that the average wage earner was not desirous of or eligible for charity. Yet, for many reasons, he may be absolutely unable to meet a medical crisis involving a considerable sum of money. What, then, could be done that would enable him to have free choice of physician, secure treatment at a price commensurate with his income, and pay for it in a systematic and business-like manner?

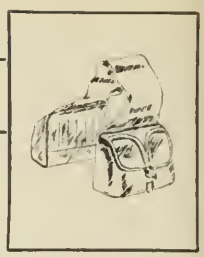
The result was the taking of PREVENTIVE steps through the establishment of the Medical and Dental Business Bureau, to be operated under supervision of an advisory committee of physicians. It is a business office where necessary commercial matters may be properly handled, yet in no way conflict with the personal relation of doctor and patient.

The bureau's duty is to secure the credit information necessary in order to determine the facts and circumstances of the patient. The doctor is

(Continued on page 361)



INDIANA MEDICINE IN RETROSPECT

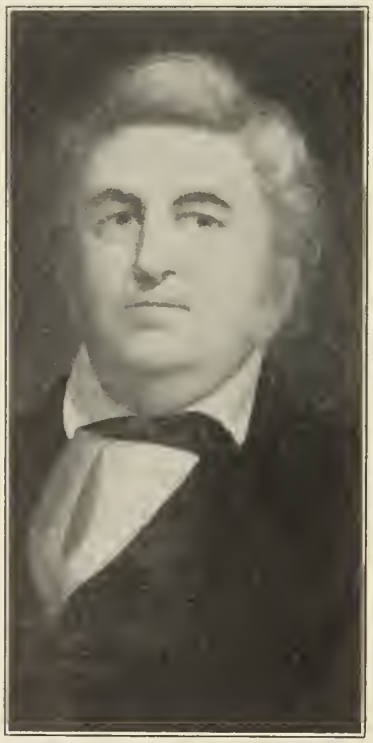


L. G. ZERFAS, M. D.
Historian, Indiana State Medical Association

JOSEPH H. D. RODGERS, Madison, Indiana

Dr. Joseph H. D. Rogers was born near Lexington, Kentucky, in 1805. He attended Transylvania University during the winter of 1834-35, studying medicine under Dr. Benjamin W. Dudley. This was Dr. Rogers' third year as a medical student. He was a colonel in the Texas rebellion in association with General Sam Houston in 1836.[1]

CAT.



Joseph H. D. Rogers, M. D.

About 1840 Dr. Rogers settled in Madison, Indiana, where he established a large practice before his retirement in 1875. He was a man of large physique and strong personality, and enjoyed a widespread reputation as a surgeon in southern Indiana and northern Kentucky.[2]

Dr. Rogers was present at the Medical Convention held at Indianapolis, June 6, 1849, at which time the present State Medical Association was founded.[3] He was the father of the late Dr. Joseph G. Rogers. Dr. Joseph H. D. Rogers died at Madison, Indiana, in 1885.[2]

[1] Letter of Dr. Clarke Rogers, Indianapolis, March 27, 1935, Grandson of Dr. Joseph H. D. Rogers.

[2] G. W. H. Kemper, A Medical History of the State of Indiana. American Medical Association Press, Chicago, 1911, p. 183.

[3] Ibid, p. 335.

GEORGE F. JAQUESS, Posey County, Indiana

Very little is known concerning the biography of Dr. George F. Jaquess.* He is thought to be the son of Jonathan J. Jaquess, who was born in New Jersey in 1753 and served in the American Revolution under Colonel Sheldon, Commander of the 7th New Jersey Regiment, afterwards known as the Light Horse Brigade. The family emigrated to Kentucky, settling near Cynthiana. In September, 1815, the family, consisting of himself, his wife and nine children, moved to Posey County, Indiana, near the place now known as Poseyville.

In 1820 George F. Jaquess attended his first course of medical lectures at Transylvania University. He is the first student from the State of Indiana whose name appears on the register. Two years later, 1822, he is listed as a graduate on the register of the Ohio Medical College at Cincinnati. His thesis was entitled "Sick Stomach," a synonym for milk sickness, so prevalent in that section of the state.

Any additional information concerning his career would be welcome.

JOHN H. SANDERS, Indianapolis, Indiana

Dr. John H. Sanders came to Indianapolis, Indiana, in the winter of 1829-1830. Dr. William H. Wishard[1] has given a biographical sketch of him, from which I have drawn freely.

Dr. Sanders was born in Bourbon County, Kentucky, in 1791. He became a student of Dr. Samuel G. Mitchell at Paris, Kentucky. "In the fall of 1819 he went to Philadelphia to attend his first course in medicine, making the journey on horseback. On his return in 1820 he settled in Millersburg, in the county where he was born, and took the lead in surgery. Soon after his return in 1820 he performed the first amputation of the leg that was ever performed in the neighborhood in which I (Dr. William H. Wishard) was born, near Car-

* Indiana Magazine of History, Vol. 17, p. 25.
History of Posey County, Indiana. Goodspeed Publishing Co., Chicago, 1886, p. 622.
Letters of Aurelia Jaquess Crutcher, New York, April 11, 1935, and April 27, 1935.

[1] Elizabeth Moreland Wishard, William Henry Wishard. Hollenbeck Press, Indianapolis, 1920, p. 220.

lisle, Kentucky. He performed all the surgical operations for Bourbon and the adjoining counties." In 1822 he attended a course of lectures given at Transylvania University and graduated in 1823. He moved to New Castle, Henry County, Indiana, in 1924, where he formed a partnership with Dr. Drenon, one of the leading physicians of that place. From here he moved to Indianapolis, as previously stated, and formed a partnership with Dr. John Leland Mothershead, who also attended medical lectures at Transylvania University.

Dr. Sanders was appointed as a member of the first board of health for Indianapolis,[2] which organization was brought about by the epidemic of cholera which appeared in 1832-1833.

In the Indiana Journal[3] appears this notice: "Drs. Sanders and Mothershead have removed their office to the drug store of Mothershead, Dawson and Co., where one or both may at all times be found unless professionally absent. . . . P. S. We are in need of money and are compelled to have it. Many of our accounts are of long standing. Such must be settled."

May 20, 1837,[4] Dr. John H. Sanders was called to the chair at a meeting of the citizens of Marion County "to take into consideration the alarming and deplorable condition of the monetary affairs of the country, and particularly the unexpected suspension of specie payments by the banks of New York, Philadelphia, Baltimore and Cincinnati, as reported in letters received by express on yesterday evening by the directory of the State Bank of Indiana."

Dr. Sanders' residence in 1836 was located "west of the Governor's Circle and on the corner of Market Street," while his office or shop was located "three doors east of the postoffice on Washington Street."[5] Zerelda G. Sanders, eldest daughter of Dr. Sanders, married David Wallace, then lieutenant-governor, the same year and became the stepmother of General Lew Wallace.[6]

In 1839 Dr. Sanders removed to the Ozark Mountains near Springfield, Missouri, but returned to Indianapolis in 1841. Shortly after he formed a partnership with Dr. Charles Parry. His last partner was Dr. Patrick H. Jameson.

The Indianapolis Medical Society is said to have been organized in 1848,[7] and the president that year was Dr. John H. Sanders.

The state medical convention assembled in the Wesley Chapel at Indianapolis on Wednesday, June 6, 1849, at 10 o'clock a. m. Dr. Sanders acted as chairman of the convention and Dr. John S. Bobbs secretary. Here was laid the foundation for our present State Medical Association. At this preliminary meeting, on motion of Dr. Sanders, it was resolved, "That a committee of five be appointed to memorialize the legislature, asking them to provide by law for a registration of marriages, births and deaths."[8] As is well known, many years elapsed before favorable legislative action was taken. On April 4, 1850, he died from cholera on board a steamer on the Mississippi River.

[2] Indiana Journal, Indianapolis, Indiana, July 20, 1833, Vol. 11, No. 556.

[3] Ibid., July 9, 1836, Vol. 14, No. 729.

[4] Ibid., May 20, 1837, Vol. 14, No. 780.

[5] Ibid., December 14, 1836, Vol. 14, No. 752.

[6] Ibid., December 27, 1836, Vol. 14, No. 755. Lew Wallace, An Autobiography. Harper & Bros., New York, 1906, Vol. 1, p. 45.

[7] G. W. H. Kemper, A Medical History of Indiana. American Medical Association Press, Chicago, 1911, note p. 73.

[8] Ibid., 142 and 148.

ACKNOWLEDGMENTS FROM STATE HISTORIAN

Dr. Giles E. Mowrer, secretary of the Clark County Medical Association, has loaned the minutes of the Clark County meetings from April 6, 1886, to February 2, 1904, to the State Historian.

Dr. John P. Showalter, secretary of the Dekalb County Medical Society, has furnished the State Historian's office with the names of the members of the local society in 1895.

Dr. A. C. Rettig, secretary of the Delaware-Blackford County Medical Society, has sent copies of the constitutions of the local society, as published in 1903 and 1933; the latter copy contains a history of the society written by Dr. Cowing.

Dr. Edwin L. Libbert, of Lawrenceburg, Indiana, has sent to the State Historian a copy of Judge Ricketts' article, "The Medical Profession," a history of medicine in Dearborn and Ohio counties. Dr. Libbert is planning to carry this history from 1885 up to the present.

Dr. R. Carlyle Buley, of Indiana University, has loaned to us a copy of the fourth American edition of the Universal Receipt Book or Practical Library. This contains a chapter of seventy pages on medicine, giving the symptoms and cures for every known disease.

Dr. D. S. Conner, Cannelton, Indiana, has sent to the State Historian a copy of the Constitution and By-Laws of the Perry County Medical Society and a list of the members in 1887.

Dr. Cassell C. Tucker, Greencastle, has sent in a copy of the 1878 Constitution and By-Laws of the Putnam County Medical Society, and an 1884 Fee Bill.

Dr. John L. Sharp, secretary of the Montgomery County Medical Society, has loaned the State Historian the minutes of the society from 1872 to the present.

Dr. F. S. Crockett, Lafayette, has forwarded to the State Historian copies of two articles on the medical history of Tippecanoe County, one by G. F. Beasley, M. D., from the New Historical Atlas; the other, by Dr. S. S. Washburn from "Past and Present of Tippecanoe County, Indiana."

Dr. W. J. Marshall, of Kokomo, has loaned the State Historian the minutes of the Howard County Medical Society from March 3, 1871, to the present. The society is having these bound uniformly for preservation in their files. Dr. Marshall is planning to write a history of medicine in Howard County.

Dr. R. A. Gilmore, of Michigan City, has reported that all the records of the LaPorte County Medical Society have been lost.

(Acknowledgments will be made occasionally as space permits.)

WHAT ABOUT THE EIGHT-HOUR DAY FOR NURSES?

By NELLIE G. BROWN
President, Indiana State Nurses Association

(This article is published in the belief that the plan as outlined here is of great importance to the medical profession as well as to the nursing profession. Publication of the article does not indicate that the plan has the approval of the Indiana State Medical Association or THE JOURNAL.*)*

In 1926 a study of nursing was undertaken by a committee composed of representatives of seven organizations vitally interested in nursing, including the American Medical Association and the American Nurses Association.*

FACTS ABOUT SPECIAL DUTY NURSING

In 1928 a report covering two years of work was published, and it disclosed the following facts about special duty nursing:

Nursing is like no other vocation, profession, or business in hours or conditions of work. The main differences briefly are that nursing work is irregular, more so than the so-called seasonal occupations. Nurses wait long periods for a "call," then when one is received, the nurse works from twelve to twenty hour periods every day as long as the case lasts. At the same time that these nurses are working inordinately long hours, many others are idle and most unprofitably idle, because they cannot engage in any systematic study or other occupation for fear of missing the badly-needed call.

The annual incomes of special duty nurses are low. In 1926, a year considered prosperous and with employment high, nurses earned from less than $1,000 to an average of $1,311 per year.* Worst of all, there are countless un-nursed patients. They are un-nursed partly because it has been the custom to employ nurses either for long daily periods of time at a price they cannot afford to pay, or not at all.

These undesirable conditions carry in their train effects equally undesirable. The special duty nurse is chronically tired; she stands a greater chance of breaking down with tuberculosis than does her sister in institutional work or in the public health field.*

On duty, the nurse unconsciously spares herself because of the hours ahead; she rests whenever possible, and because of lack of privacy, she frequently is accused of caring for her personal needs, finger-nails, hair, in the patient's room. She may also be considered uninteresting, unintelligent, and out of touch with current affairs. When in the hospital, she sleeps on a cot in the patient's room, eats all three meals in the hospital dining room (at the patient's expense), dresses and undresses in a dressing room usually ill suited to the purpose, and at the conclusion of the hospital stay, the business office of the institution receives a complaint about the bill.

* Committee on Grading of Nursing Schools.

BETTER NURSES THROUGH BETTER DISTRIBUTION

Influenced by these facts, the American Nurses Association set forth among its 1933 objective affecting special duty nurses that of "better distribution of adequately prepared nurses" and "shorter periods of duty for private duty nurses." By October, 1933, the eight-hour day was in effect in portions of one-third of the states of the Union. Forty-eight local nurses' organizations reported that the eight-hour day was functioning in their communities. The progress has been steady and rapid. In December of the same year (1933) there were 150 hospitals which had placed their special duty nurses on an eight-hour program. It seems incongruous for an institution whose principal function is the restoration of health to permit one group to work such long periods. Hospital people saw the point rapidly; by September of 1934 the number of hospitals doubled, and 300 reported eight-hour nursing days.

RESULTS OF THE EIGHT-HOUR DAY

The results have been greater than the nurses anticipated. Patients are being better cared for by nurses who are energetic and alert. Ninety-eight per cent of the patients approve the change and find the costs no greater than under the old plan. The nurses provide their own meals, the hospitals remove these controversial items from the patient's bill, and while each nurse is paid less by the day, the additional days of work give her a better and more evenly distributed yearly income.

For many patients, the cost is less, for a patient may have one, two, or three eight-hour units of care, or even less, on an hourly basis. In other words, the patient may employ a nurse for the period of time that fits his needs and his pocketbook.

Are there disadvantages? Certainly! No changes affecting patients, nurses, physicians, and hospitals could be made without the necessity for "ironing out" misunderstandings. Two per cent of the patients in 150 hospitals studied in 1933 objected to changing nurses frequently. Hospitals objected to losing the income derived from the nurse's board, formerly paid by the patient, but the hospitals are willing to forego this in the interest of happier nurses and satisfied patients. Since the inauguration of the eight-hour program, physicians who expressed opposition before the change was made now favor its continuance, because they want their patients cared for by nurses who are alert mentally

(Continued on page 361)

DIPHTHERIA DEATHS FOR MAY, 1935

There were five deaths during the month of May from diphtheria. One of them is a very exceptional one, inasmuch as it was a child sixteen days old. Death from diphtheria at such an early age is extremely rare. Another one was that of an adult thirty-two years old. The other persons were three, eight and eleven years of age.

It is interesting to note that all of the deaths are in rather large cities. There is now a total of thirty-eight deaths from diphtheria for the year. This is the smallest number at this time of the year that has been reported but it is only two less than for the corresponding time last year.

Below will be found a list of the deaths by counties for the month of May and for the year to date:

County	No. Deaths May, 1935	Total for 1935
Allen	1	4
Boone	0	1
Bartholomew	0	1
Crawford	0	1
Delaware	0	1
Elkhart	0	1
Grant	0	1
Fayette	0	1
Jackson	0	1
Lawrence	0	2
Lake	0	1
Laporte	0	1
Madison	0	1
Marion	2	12
St. Joseph	1	1
Spencer	0	1
Steuben	0	1
Tippecanoe	1	2
Vigo	0	1
Warrick	0	1
Wayne	0	1
Knox	0	1
Total	5	38

THURMAN B. RICE, Chairman,
Diphtheria Prevention Committee.

INDIANA DIVISION OF PUBLIC HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report, May, 1935

	May 1935	Apr. 1935	Mar. 1935	May 1934	May 1933
Tuberculosis	179	225	173	150	59
Chickenpox	375	497	721	183	460
Measles	1,089	1,819	2,764	5,036	1,173
Scarlet Fever	451	724	1,042	461	431
Smallpox	3	9	4	8	4
Typhoid Fever	14	2	7	21	29
Whooping Cough	245	335	202	266	91
Diphtheria	66	75	94	48	65
Influenza	46	144	277	56	94
Pneumonia	90	124	97	16	23
Mumps	162	109	114	53	169
Poliomyelitis	0	1	1	4	9
Meningitis	13	24	19	3	10
Undulant Fever	5	0	4	1	0
Encephalitis	0	4	4	1	0

SECRETARIES' COLUMN

Mr. Secretary, if you didn't go to Atlantic City for the joint meeting of the A. M. A. and the C. M. A. you missed a lot. Fine weather was in order, wonderful scientific exhibits and papers were presented. Indiana had a good representation at this meeting.

I am informed that Dr. Leach, our president, has had a severe illness, and is improving. It would be nice if every secretary would send him a card to cheer him on the road to recovery.

Do you know that the California State Supreme Court has ruled that any law that compels the employer to pay part of the money for sickness insurance is unconstitutional?

I believe it will be very educational to every secretary to read the minutes of the meeting of the House of Delegates of the A. M. A. held in Atlantic City.

Mr. Secretary, please keep in mind that preventive medicine is in the hands of the county medical society in this state and that your society can do a lot of good by having meetings, both lay and medical, in this field of public health.

Will your society have a picnic this year? You know a little fun once a year helps a lot.

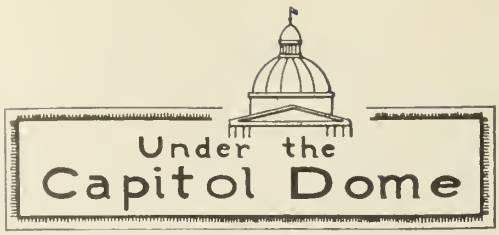
Under the present economic conditions affecting the medical profession the honor of being president of our State Association is taking on the aspects of a job. This job is putting a strain on the one so honored that is beyond belief. Is it necessary to punish a president by having him travel and talk all the time? Why can't the state society have a walking delegate who can take a lot of the burden off of the president? I do not believe that the honor of being president should be exacting enough to impair the president's health. Think about this seriously.

If any secretary has any suggestions about the program for the next Annual Secretaries' Conference, please send them to me. I want the next conference to be the biggest and best we have ever had. The committee wants to put on a program that you will like. Think, get busy, and send in your suggestions.

Remember, Gary is the place for the state meeting in October. See you there.



Chairman.



POISONOUS DRUGS

Members of the state board of pharmacy are at work on the preparation of a list of habit-forming and poisonous drugs, which list will be issued to druggists. Authority to designate certain drugs and chemicals as poisonous is vested in the board, according to an opinion written by Philip Lutz, Jr., attorney general.

* * *

HIGHWAY ACCIDENTS

Accidents on highways in Indiana have dropped fourteen per cent, but fatalities in motor vehicle accidents have increased eighty-one per cent, according to a report of James D. Adams, chairman of the state highway commission. The statement was based upon a comparison of accident statistics for the first quarter of 1935 with the same period in 1934.

* * *

On basis of these statistics the ratio of deaths to accidents has jumped from one death in every nine accidents to one in every four reported to the highway commission. These reports include accidents only on state highways, not including those in cities and towns.

Fatalities occurred in 88 of the 429 accidents reported during January, February, and March of this year, compared to fatalities in 51 of 449 accidents a year ago. A total of 103 persons were killed this year against 57 in the same three-months period in 1934.

In the 429 accidents reported this year, 413 persons were injured, while 459 persons were injured in the 499 accidents in 1934, a reduction of ten per cent for this year. Eighty-two of the persons injured this year received their injuries in accidents in which there was one or more fatalities. A year ago only 38 of the 459 persons injured in motor vehicle accidents on the state highways were injured in accidents in which fatalities occurred.

* * *

BARBERS' LICENSES REVOKED

Licenses of approximately 500 barbers in Indiana have been revoked because examining physicians discovered syphilitic or tubercular conditions, according to Frank McKamey, secretary of the state board for licensing and examining barbers.

The barbers thus afflicted were immediately removed from the practice of their profession.

The group of 500 was found in a total of 8,000 registered barbers, Mr. McKamey said.

Although no accurate record was made, Mr. McKamey said that by far the greater number of barbers whose licenses were revoked were afflicted with syphilis.

Examinations are made by physicians appointed by the barbers' board. The number of approved physicians vary in each county, the counties of larger population having the most examiners.

Mr. McKamey said that all examining physicians did not turn in reports to the board, and in some instances an estimate was made to obtain the complete figure, which he said was a conservative estimate.

"The fact that 500 men were working at this profession while in such a condition was a great public danger," Mr. McKamey said. "If the board does nothing but remove them from places where they might infect others, it has more than justified its existence."

* * *

Dr. Theodore P. Rhodes of Indianapolis has been selected by Governor Paul V. McNutt as a member of the state board for registration and control of beauty operators and beauty shops. Terms of the law, which was passed by the 1935 session of the Indiana General Assembly, provide for the appointment of one physician. The board will make rules governing sanitation, physical fitness of operators, and similar matters in connection with the work of beauty shops. Dr. Rhodes was elected president of the board at its first meeting.

* * *

The Indiana state clemency commission this month denied the petition of John R. DeRoahn of Indianapolis, who asked a parole from a sentence imposed in the Marion County Criminal Court for performing an abortion. DeRoahn, who is 70 years old, was sentenced July 27, 1932, to serve three to ten years in the Indiana State Prison at Michigan City. Record in his case showed that DeRoahn was a "herb doctor."

* * *

Three Indiana physicians have been cited to appear before the state board of medical examination and registration at its next meeting to show cause why their licenses should not be revoked. All have been convicted recently of criminal charges. They are Dr. James F. Treon of Aurora, convicted of violating the narcotic act; Dr. Benjamin F. Patton, of Terre Haute, convicted also of violating the narcotic act, and Dr. Fred J. Freshley of Plainville, convicted of arson in Knox County.

The cases will be decided by the medical board at a meeting the second Tuesday in July.

DEATH NOTICES

JOHN I. MILLER, M. D., of Gary, died June thirteenth, aged fifty-seven years. Dr. Miller graduated from the Illinois Medical College, Chicago, in 1908. He had practiced in Wyoming, where he was a member of the Wyoming House of Representatives in 1923.

JOHN R. ABNER, M. D., of Hamlet, died May twenty-fourth, aged seventy-seven years. Dr. Abner had practiced in Hamlet since 1898. He graduated from the Curtis Physio-Medical Institute in Marion in 1884.

WILLIAM R. BECK, M. D., Huntington, died May twenty-first, aged seventy-one years. Dr. Beck was a graduate of the Kentucky School of Medicine, Louisville, in 1892.

J. J. SHULTZ, M. D., of Delphi, died May twenty-first, aged seventy-eight years. Dr. Shultz had practiced in Delphi for fifty-four years. He was a member of the Carroll County Medical Society, the Indiana State Medical Association, and the American Medical Association, and was a graduate of the Eclectic Medical College of Cincinnati in 1879.

THOMAS G. SMITH, M. D., of Brownsburg, died May twenty-sixth, aged seventy-one years. Dr. Smith was a graduate of the Central College of Physicians and Surgeons of Indianapolis in 1897.

PERRY WOOLERY, M. D., of Bedford, died May twenty-third, aged sixty-five years. Dr. Woolery was a member of the Lawrence County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the Louisville Medical College in 1897.

DAVID E. REED, M. D., of Russellville, died May thirty-first, aged sixty-two years. He graduated from the Kentucky School of Medicine, Louisville, in 1898, and was a member of the Montgomery County Medical Society, the Indiana State Medical Association, and the American Medical Association.

WILLIAM ELLIOTT BROWN, M. D., Negro physician of Indianapolis, died May sixteenth, aged seventy-two years. Dr. Brown had practiced in Indianapolis for forty years. He graduated from the University of Michigan Medical School, Ann Arbor, in 1895.

HOOSIER NOTES

NOTES FROM THE A.M.A. AT ATLANTIC CITY

Indiana physicians were prominent in the medical demonstration work in the scientific exhibit which was a major feature of this year's session. The Indiana University School of Medicine had a display under the direction of Drs. Harold Trusler, F. G. Hemlich and J. F. Glore, showing the results of plastic and reconstructive surgery. Indiana had two exhibits in the section on preventive and industrial medicine and public health, one under the direction of Dr. Thurman B. Rice and Dr. James R. Reeves on the "Etiology of Anaerobic Infections," and the other under the direction of Drs. K. K. Chen, Charles L. Rose and G. H. A. Clowes of the Lilly Research Laboratories, showing sources of cyanide poisoning, death rates, tests for diagnosis, antidotes, and treatment. This exhibit received an honorable mention award in its class.

Dr. C. O. McCormick of Indianapolis conducted a motion picture demonstration on rectal ether and oil, before the Section on Obstetrics and Gynecology.

A large number of Indiana firms were exhibitors in the technical exhibits.

Registration totalled 8,469. The following Indiana physicians registered:

Adams, C. J., Kokomo
Allen, H. E., Richmond
Altier, William H., Fowler
Baker, Clarence S., Evansville
Baker, Herman M., Evansville
Barnett, W. E., Logansport
Beckman, H. F., Indianapolis
Bickel, David A., South Bend
Bohner, C. B., Indianapolis
Borders, Theodore R., Fort Wayne
Bradfield, John C., Logansport
Brown, Frances T., Indianapolis
Bulson, Eugene L., Fort Wayne
Cameron, Don F., Fort Wayne
Calvert, Raymond R., Lafayette
Cartwright, E. L., Fort Wayne
Caylor, Truman E., Bluffton
Chen, K. K., Indianapolis
Clark, Cyrus J., Indianapolis
Clark, Stanley A., South Bend
Cleveland, W. R., Evansville
Collins, James N., Indianapolis
Crimm, Paul D., Evansville
Crockett, F. S., Lafayette
Cushman, J. B., Darlington
Darroch, S. C., Cayuga
Dillinger, George R., French Lick
Doeppers, William A., Indianapolis
Doerr, John E., Mt. Vernon
Donahue, George R., Lafayette
Duemling, W. W., Fort Wayne
Duggan, James A., South Bend
Dunn, F. W., Muncie
Eckert, G. G., Marion
Egan, B. W., Logansport
Ellis, Bert E., Indianapolis
Ferguson, Arthur N., Fort Wayne
Foreman, Harry L., Indianapolis
Gante, H. W., Anderson
Gastineau, F. M., Indianapolis
Garceau, George J., Indianapolis
Giordano, Alfred S., South Bend
Graham, A. B., Indianapolis
Green, W. L., Pekin
Griffith, James W., Sheridan
Hamer, H. G., Indianapolis
Harcourt, Allan K., Indianapolis

Harvey, Verne K., Indianapolis
Hare, E. H., Indianapolis
Hendricks, Mr. Thomas A., Indianapolis
Henley, Glenn, Fairmount
Hippensteel, R., Indianapolis
Holloway, Wm. A., Logansport
Hyman, Bernard, Indianapolis
Isler, N. C., Jeffersonville
Jackson, Helen L., Evansville
Jackson, Katherine, Fort Wayne
Keeney, B. G., Shelbyville
Kelsey, Robert M., LaPorte
Kelly, John F., Indianapolis
Kempf, Gerald F., Indianapolis
Knapp, H. C., Huntingburg
Kraft, Bennett, Indianapolis
Kruse, Edward H., Fort Wayne
Kuhn, Hugh A., Hammond
Lapenta, Vincent A., Indianapolis
Larkin, B. J., Indianapolis
Littig, Amy, Marion
Logan, A. R., Petersburg
Lyon, Marcus W., Jr., South Bend
Lyon, Martha B., South Bend
Lutz, Georgianna, Gary
Malone, L. A., Terre Haute
Martin, H. G., Lafayette
McCaskey, C. H., Indianapolis
McClelland, D. C., Lafayette
McCormick, C. O., Indianapolis
McDonald, R. M., Mishawaka
Mentzer, S. E., Monroeville
Mettel, H. B., Indianapolis
Mitchell, A. M., Terre Haute
Montgomery, L. G., Muncie
Moore, Paul D., Muncie
Moore, Robert M., Indianapolis
Myers, Roy V., Indianapolis
Nixon, Byron, Indianapolis
Nixon, Sater, Indianapolis
Pearson, L. R., Indianapolis
Pettibone, C. R., Crown Point
Rhamy, B. W., Fort Wayne
Rhea, J. C., Indianapolis
Rice, Thurman B., Indianapolis
Riggs, Floyd C., Terre Haute
Rosenheimer, George M., South Bend
Row, D. H., Indianapolis
Sanders, I. M., Greensburg
Schoen, P. H., New Albany
Segar, Louis H., Indianapolis
Sensenich, R. L., South Bend
Sichler, H. G., Lafayette
Spangler, Jesse A., Kokomo
Smith, Lester A., Indianapolis
Symon, William G., Garrett
Strange, J. W., Loogootee
Taylor, F. W., Indianapolis
Thompson, Sue H., Gary
Thornton, H. C., Indianapolis
Trusler, H. M., Indianapolis olis
Underwood, G. B., Evansville
Van Buskirk, E. M., Fort Wayne
Veach, P. H., Staunton
Weyerbacher, A. F., Indianapolis
Whallon, A. J., Richmond
Wheeler, H. H., Indianapolis
Whitlock, M. E., Mishawaka
Woolery, Homer, Bloomington
Wright, C. S., Indianapolis

DR. VINCENTE R. LAZO and Miss Alice Bennett, both of Shelburn, were married May eighteenth.

DR. JOHN S. BOWLES of Muncie and Miss Mary Joanna Kelsey of Muncie were married June fourteenth.

DR. HAROLD OYER of Angola and Miss Doris Bauer of Fort Wayne were married June seventh in Angola.

DR. FRED MALOTT and Miss Lillian Shambaugh have announced their marriage which took place at Terre Haute, July 14, 1934.

DR. FRANCES M. JOHNSON of Marion and Mr. Alyn G. Price of Cleveland were married recently. They are residing in Cleveland.

DR. AND MRS. E. M. SHANKLIN of Hammond have announced the marriage of their daughter, Elinor Madge, to Mr. H. T. Tuinman, on June fifth.

DR. AND MRS. FLOYD A. LOOP of Lafayette have announced the marriage of their daughter, Alberta, to Dr. Milton F. Popp of Chicago. Dr. and Mrs. Popp will reside in Fort Wayne.

THE International Union for the Scientific Investigation of Population Problems will meet in Berlin, August twenty-sixth to September first, 1935.

DR. W. DURBIN DAY, who has been in the government service at Edward Hines, Jr., Hospital in Chicago for the past five years, is locating at Seymour, where he will specialize in surgery.

DR. A. W. CAVINS of Terre Haute has resigned as physician in charge of the Rose Dispensary. Dr. Cavins will do some postgraduate work in the east this summer and return to practice in Terre Haute in the early fall.

DR. JOHN C. SHARRER of Francisville will observe his fifty-fifth anniversary in the practice of medicine on July first. Dr. and Mrs. Sharrer celebrated their fifty-sixth wedding anniversary on June eleventh.

DR. R. L. SENSENICH of South Bend addressed the South Bend Council of Social Agencies, May twenty-fourth, and outlined the reasons why the present system of private practice is preferable to health insurance.

DR. EDWARD L. EFROYMSON of Indianapolis was the winner this year of the Ravdin medal, given annually by Dr. M. Ravdin of Evansville to the Indiana University medical school senior who makes the highest scholastic average in the course.

THE Fort Wayne Medical Society at its May twenty-first meeting elected officers as follows: Dr. Herbert A. Ray, president; Dr. Juan Rodriguez, vice-president; Dr. W. W. Duemling, secretary (re-elected); and Dr. E. L. Cartwright, treasurer (re-elected).

DR. AND MRS. FRANK E. WIEDEMANN of Terre Haute left the latter part of June for Europe where Dr. Wiedemann will do some observation work in diagnosis and internal medicine. Before returning, they will visit the Tyrolien and Bavarian Alps.

DR. W. T. LAWSON of Danville has been elected to membership in the Sigma Phi Kappa Delta, national teacher training fraternity at Central

Normal College, in recognition of his service to the college during the twenty-five years that he has served on the board of trustees.

AT THE 113th annual commencement of the Philadelphia College of Pharmacy and Science, June fifth, Eli Lilly, president of Eli Lilly and Company of Indianapolis, was one of three men prominent in pharmacy and related professions who were given honorary degrees.

DR. EMOR L. CARTWRIGHT and family of Fort Wayne went to Atlantic City where Dr. Cartwright attended the meetings of the American Proctologic Society and the American Medical Association, following which they enjoyed a short vacation in Maine.

DR. EDGAR F. KISER of Indianapolis read a paper on "Speculum Matricis" by James Wolveridge, one of the rarest English books on midwifery, before the eleventh annual meeting of the American Association of the History of Medicine, which met in Atlantic City, May sixth.

TULANE UNIVERSITY celebrated its hundredth year in June and in commemoration of its achievement of a full century of medical and other higher education a four-day fete, June 8-12, included elaborate programs with the awarding of honorary degrees to thirteen outstanding Americans.

DR. BEAUMONT S. CORNELL of Fort Wayne has been made a member of the American Gastro-Enterological Association and has been re-named supervising editor of the American Journal of Digestive Diseases and Nutrition. Dr. Cornell is the only Indiana member of the organization.

DR. ERNEST RUPEL of Indianapolis attended the annual meeting of the Detroit Branch of the American Urological Association, in Lansing, Michigan, May twenty-fifth. Dr. Rupel made the after dinner address, his subject being "Urological Diagnosis; The Problem of the Difficult Case."

DR. WILLIAM F. MOLT of Indianapolis attended the meetings of the American Bronchoscopic Society, the American Laryngological Society, the American Otological Society, and the American Rhinological, Laryngological, and Otological Society in Toronto, Ontario, from May twenty-seventh to June fifth.

DR. THEODORE B. RHODES of Indianapolis has been elected president of the new three-member state beauty culture board. An office for the board will be established in the State House. Methods of procedure under the new law licensing beauty parlor operators and employees were discussed at the first meeting, June thirteenth.

A MAN representing himself to be L. C. DuBois, M. D., weighing about 190 or 200 pounds, dark hair, well dressed, has been purchasing whisky from dealers in Indiana under the pretext of using it for samples to be tested by the State Board of Health. He gives personal checks for the whisky, and the checks, of course, are worthless.

THE American Congress of Physical Therapy announces its fourteenth annual session to be held September ninth to twelfth, inclusive, in Kansas City. Preceding the session, September fifth to seventh, there will be an instruction class covering the field of physical therapy. Information may be obtained by addressing the organization at 30 North Michigan Avenue, Chicago.

THE Central State Hospital of Indianapolis was represented on the program of the annual meeting of the American Psychiatric Association in Washington, D. C., May 13-17, with a scientific exhibit, "The Aorta in Neurosyphilis." The exhibit illustrated various types and degrees of specific involvement of the aorta found at autopsy in cases of general paralysis, cerebral lues, and tabes.

ABOUT fifty physicians and internes attended a reunion and dinner at the St. Joseph's Hospital in Fort Wayne, June eleventh, when the St. Joseph's Hospital Interne Association was organized. Dr. M. E. Klingler of Garrett was elected president; Dr. O. H. Swantusch of Angola was made vice-president; and Dr. J. E. McArdle of Fort Wayne was made secretary.

THE Latin-American Congress of Physical Therapy, X-ray and Radium will hold its first annual meeting in Mexico City from August twenty-ninth to September fifth. The National University of Mexico will act as host to the North American physicians, and the government will participate in extending hospitality to delegates. Further information may be obtained from the executive office, 1013 Lexington Avenue, New York City.

THE 134th semi-annual meeting of the Union District Medical Association was held at Eaton, Ohio, April twenty-fifth. Dr. W. A. Thompson of Liberty is secretary-treasurer of the organization, which has members in Indiana and Ohio. Speakers on the program were F. T. Baumgartner, D.D.S., Oxford, Ohio; Ralph W. Good, M.D., Cincinnati; George Curtis, M.D., Columbus; Max A. Bahr, M.D., Indianapolis; and Thurman B. Rice, M.D., Indianapolis.

PLANS for the state meeting of the Woman's Auxiliary to the Indiana State Medical Association to be held in Gary October 8-10, were discussed at a luncheon given by Mrs. Edmund D. Clark of Indianapolis, state president. Mrs. Rogers N. Herbert of Nashville, Tennessee, president of the National Auxiliary, will be one of the speakers at the Gary meeting. Officers who attended the luncheon were: Mrs. E. O. Nay of Terre Haute, Mrs. John Eberwein, Mrs. W. S. Tomlin, Mrs. John T. Wheeler, and Mrs. O. G. Pfaff, all of Indianapolis, Mrs. George Dillinger of French Lick, Mrs. Clarence Rae of Muncie, Mrs. Fred B. Wishard of Anderson, Mrs. J. C. Miller of Anderson, Mrs. C. S. Mix of Muncie and Mrs. I. N. Trent of Muncie.

OFFICERS for district societies which have been reported to us are as follows:

Fourth District: President, P. C. Bentle, of Greensburg; vice-president, W. H. Stemm, North Vernon; secretary-treasurer, Charles Overpeck, Greensburg; councilor, M. C. McKain, Columbus.

Sixth District: President, J. L. Allen, Greenfield; secretary-treasurer, Frank Green, Jr., Rushville; next meeting, Shelbyville, May 14, 1935.

Ninth District: President, Gordon A. Thomas, Lafayette; vice-president, W. W. Washburn, Lafayette; secretary-treasurer, J. C. Burkle, Lafayette; next meeting, Lafayette, May 1936.

Tenth District: President, H. J. Brown, Valparaiso; vice-president, H. O. Seipel, Valparaiso; secretary-treasurer, G. R. Douglas, Valparaiso; councilor, N. K. Forster, Hammond (to 1938).

Eleventh District: President, George D. Balsbaugh, North Manchester; secretary-treasurer, O. G. Brubaker, North Manchester; next meeting, Peru, October 16, 1935.

Twelfth District: President, W. W. Swarts, Auburn; vice-president, C. E. Munk, Kendallville; secretary-treasurer, A. J. Sparks, Fort Wayne.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

The Cutter Laboratory—
- Solution Dextrose U. S. P. 2½% in Physiological Solution of Sodium Chloride in Saftiflask Containers
- Solution Dextrose U. S. P. 5% in Physiological Solution of Sodium Chloride in Saftiflask Containers
- Solution Dextrose U. S. P. 10% in Physiological Solution of Sodium Chloride in Saftiflask Containers
- Solution Dextrose U. S. P. 20% in Fractionally Distilled Water in Saftiflask Containers
- Solution Dextrose U. S. P. 25% in Fractionally Distilled Water in Saftiflask Containers

Merck & Co., Inc.—
- Ephedrine Alkaloid (Hemihydrate)
- Ephedrine Hydrochloride
- Ephedrine Sulphate

The National Drug Co.—
- Ampul Solution of Dextrose, 10 gm., 20 cc.
- Ampul Solution of Dextrose, 25 gm., 50 cc.
- Ampul—Vial Solution of Dextrose, 25 gm., 50 cc.
- Ampul—Vial Solution of Dextrose, 50 gm., 100 cc.

E. R. Squibb & Sons—
- Refined Diphtheria Toxoid Alum Precipitated, one 1 cc. vial package
- Refined Diphtheria Toxoid Alum Precipitated, ten 1 cc. vial packages
- Refined Diphtheria Toxoid Alum Precipitated, one 10 cc. vial package

Sterisol Ampoule Corporation—
- Sterisol Ampoule Dextrose 5% in Physiological Solution of Sodium Chloride

Upsher Smith Company—
- Pyrethrum Ointment

Wallace & Tiernan Products, Inc.—
- Azochloramid:
  - Azochloramid Buffered Saline Mixture (For Preparing 1 Liter of a 1:3300 Aqueous Solution)
  - Azochloramid Buffered Saline Mixture (For Preparing 1 Gallon of a 1:3300 Aqueous Solution)
  - Azochloramid Buffered Saline Mixture (For Preparing 1 Liter of a 1:1600 Aqueous Solution)
  - Azochloramid Buffered Saline Mixture (For Preparing 1 Gallon of a 1:1600 Aqueous Solution)
  - Azochloramid in Triacetin 1:500.

Winthrop Chemical Co., Inc.—
- Ampules Sterile Crystals Novocain for Spinal Anesthesia, 50 mg.
- Ampules Sterile Crystals Novocain for Spinal Anesthesia, 100 mg.
- Ampules Sterile Crystals Novocain for Spinal Anesthesia, 120 mg.
- Ampules Sterile Crystals Novocain for Spinal Anesthesia, 150 mg.
- Ampules Sterile Crystals Novocain for Spinal Anesthesia, 200 mg.
- Ampules Sterile Solution Novocain 20 per cent, 1.5 cc.
- Ampules Sterile Solution Novocain 20 per cent, 5 cc.
- Ampules Sterile Solution Novocain 20 per cent with 1-Suprarenin Synthetic Bitartrate 1:9000, 1.5 cc.
- Ampules Sterile Solution Novocain 20 per cent with 1-Suprarenin Synthetic Bitartrate 1:9000, 5cc.
- Ampules Novocain Solution 1 per cent, 2 cc.
- Ampules Novocain Solution 1 per cent with 1-Suprarenin Synthetic Bitartrate 1:50,000, 2 cc.
- Ampules Novocain Solution 1 per cent with 1-Suprarenin Synthetic Bitartrate 1:50,000, 6 cc.
- Ampules Novocain Solution 2 per cent with 1-Suprarenin Synthetic Bitartrate 1:50,000, 1 cc.
- Ampules Novocain Solution 2 per cent with 1-Suprarenin Synthetic Bitartrate 1:20,000, 1 cc.
- Ampules Novocain Solution 2 per cent with 1-Suprarenin Synthetic Bitartrate 1:50,000, 3 cc.
- Ampules Novocain Solution 2 per cent with 1-Suprarenin Synthetic Bitartrate 1:20,000, 3 cc.
- Ampules Novocain Solution 2 per cent with 1-Suprarenin Synthetic Bitartrate 1:20,000, 6 cc.
- Novocain (0.08 gm.) and 1-Suprarenin Synthetic Bitartrate (0.06 mg.) Hypodermic Tablets.
- Ampules Ephedrine-Novocain Solution, 1 cc.
- Ampules Ephedrine-Novocain Solution, 2 cc.
- Tablets Novocain, 1 grain
- Tablets Novocain 0.01 gm. with 1-Suprarenin Synthetic Bitartrate 0.2 mg.

The following products have been accepted for inclusion in the List of Articles and Brands Accepted By the Council, but not described in N. N. R. (New and Nonofficial Remedies, 1935, p. 445):

The Cutter Laboratory—
- Physiological Solution of Sodium Chloride in 500 cc. size Saftiflask Containers

Sterisol Ampoule Corporation—
- Sterisol Ampoule Physiological Solution of Sodium Chloride

United States Standard Products Co.—
- Ampoule Solution Quinine and Urea Hydrochloride 0.5 gm., 1 cc.

INDIANA UNIVERSITY NEWS NOTES

At the 106th annual commencement exercises of Indiana university, held Monday, June 17, in Memorial Stadium, the following six doctors received the doctor of medicine cum laude degree: Melvin Durkee, Evansville; David Levy, Youngstown, Ohio; O. Raymond Russell, Lapel; Milton M. Rubin, Terre Haute; Charles H. Schutt, Elkhart; Edmund L. Van Buskirk, Indianapolis.

The following ninety-three received the doctor of medicine degree:

Ralph Arisman, Elkhart
Neal Baxter, Bluffton
Samuel Bechtold, South Bend
Lowell Beggs, Scottsburg
James Bledsoe, Linton
Clarence Bosselmann, Fort Wayne
Edward Boyer, Plymouth
Robert Brosius, Fort Wayne
James Browning, Indianapolis
Stanton Bryan, Evansville
Robert M. Butterfield, Muncie
Samuel Caplin, Indianapolis
Vance Chattin, Bloomington
Stuart Combs, Terre Haute
Charles Cook, North Manchester
Kermit Covell, Angola
Robert Currie, Windfall
Jack Dittmer, Kouts
Joseph Dudding, Indianapolis
Edward Efroymson, Indianapolis
Aubrey Elston, Lapel
Richard Estlick, Columbia City
Joseph Farrell, Indianapolis
John Fisher, Worthington
Elvin Fitzsimmons, Evansville
Naomi Furnas, Indianapolis
William Gitlin, Bluffton
Adolph Goldstone, Gary
Paul Gray, Roanoke
Clarence Hartley, Jr., Evansville
Clarence Haslinger, Indianapolis
Robert Hill, Bloomington
Kenneth Jackson, Aurora
Francis P. Jones, Indianapolis
Thomas Jones, La Center, Ky.
Leo Kammen, Indianapolis
William Kammerer, Logansport
Ford Keppen, Michigan City
Chang Soo Kim, Chairyung, Korea
Robert Kinzel, Indianapolis
Philip Kurtz, Indianapolis
Chester Lamber, LaPorte
Joseph Lang, South Bend
Glen Lee, Indianapolis
James Leffel, Jr., Warsaw
John W. Little, Jr., Indianapolis
Paul Long, Anderson
Edward McArdle, Fort Wayne
Joe McCook, Evansville
George Macy, Quincy
Lee Maris, Kingman
Albert Marshall, Jr., Indianapolis
Richard May, Laconia
John Michener, Indianapolis
Harold Miller, Seymour
Mahlon Miller, Auburn
Noel Moran, Indianapolis
Virgil Miller, Rochester
Warren Morris, Aurora
Walfred Nelson, Gary
William Newcomb, Hammond
Roy Nicholson, North Manchester
Harold Nisenbaum, Indianapolis
William Orr, Dunkirk
John Palm, Harmony
Durward Paris, Kokomo
John Pennell, Kokomo
Thomas Pierson, Newcastle
Gretchen Polhemus, Mitchell
Douglas Price, Nappanee
Lewis Robbins, Indianapolis
Jacob Rosenwasser, Mishawaka
Theodore Ross, Kokomo
Kenneth Shaffer, Corydon
Meyer Shipman, Paterson, N. J.
Wilhur Shortridge, Medora
Homer Shoup, Sharpsville
Wendell Shullenberger, Indianapolis
Mrs. Isabel Morgan Slegelmilch, Knightstown
Lorin Slegelmilch, Wabash
Howard Stellner, South Bend
Morris Stern, New York City
Albert Stouder, Andrews
Richard Stover, DeLand, Fla.
Wendell Stover, Linton
Dan E. Talbott, Indianapolis
James Taylor, Villa Grove, Ill.
Ray Tharpe, Indianapolis
Margaret Thoroman, Bedford
Edward Voges, Terre Haute
George Wagoner, Burrows
Joe Weber, Indianapolis
Donald Wood, Indianapolis

The following fourteen girls received the graduate nurse degree:

Gretta Barrett, Bloomington
Mary Elizabeth Clark, Marion
Mildred Doane, Noblesville
Helen Hudson, Bentonville
Thelma Lare, Shelbyville
Mary Margaret Melsheimer, Elnora
Mary Peacock, Plainfield
Elizabeth Ray, Fort Wayne
Catherine Reger, Indianapolis
Virginia Stephenson, Lawrence
Margaret Stout, Crawfordsville
Isabel Williamson, Indianapolis
Ruby Zehring, Galveston.

The doctor of dental surgery degree was awarded to the following forty-six men:

Elmer Adams, East Chicago
Cecil Ball, Indianapolis
Max Bean, Brooklyn, N. Y.
Edward Bettcher, Indianapolis
Jacob Bloom, New York City
Robert Boesinger, Indianapolis
Ralph Brown, Newark, Ohio
John Buhler, Indianapolis
Joseph Cockerill, Parker
Dean Collins, Indianapolis
Lawrence Crane, Covington
Donal Draper, Kokomo
Hudson Erbaugh, Logansport
John Farley, Raton, N. M.
James Favorite, Huntington
Eugene Fields, Geneva
Ralph Gieringer, Miamitown, Ohio
Frank Goode, Indianapolis
John Gorsline, Logansport
Joe Goshert, Fort Wayne
Walter Grant, Columbia City
Samuel Grillo, Gary
Shelby Groves, Evansville
Philip Haft, Paterson, N. J.
Raymond Hayes, Indianapolis
Charles Kahler, Indianapolis
Hoyt Kuhns, Terre Haute
Thomas Leonard, Fort Wayne
LeRoy Maas, Chicago, Ill.
Lawrence Morris, Indianapolis
Robert Morton, Xenia, Ohio
Leo Pancoska, Chicago, Ill.
William Peacock, Darlington
Robert Raughley, Dover, Del.
Isidore Rosen, Cleveland, Ohio
LeRoy Sacks, Chicago, Ill.
John Scarborough, Indianapolis
P. A. Schwartz, Indianapolis
Ottis Scott, Borden
Louis Siegel, Cincinnati, O.
Thurman Smith, Salem
William Smith, Richmond
Arthur Stone, Columbus, O
Edward Terrill, Lawrenceburg
Frank Traster, Akron, Ohio
Donald Van Gilder, Mentone

The Ravdin medal, which is awarded annually to the senior in the Indiana university school of medicine who has the highest scholastic average, went this year to Edward Efroymson of Indianapolis. Dr. Efroymson received the degree of doctor of medicine from the I. U. school of medicine at the annual commencement exercises of the state university in June. The medal is given each year by Dr. M. Ravdin of Evansville.

The following seniors of the I. U. medical school were elected to Alpha Omega Alpha in recognition of their high scholastic records:

Edward Efroymson, Indianapolis
Wilbur Shortridge, Indianapolis
William Gitlin, Bluffton
Wendell Shullenberger, Indianapolis
Harold Nisenbaum, Indianapolis
Thomas Jones, La Center, Ky.
Philip Kurtz, Indianapolis
Clarence Bosselmann, Fort Wayne
Kenneth Jackson, Aurora
Gretchen Polhemus, Mitchell
Lorin Slegelmilch, Wabash
Morris Stern, New York City
Albert Stouder, Andrews
Edward Beck Boyer, Plymouth

Juniors chosen for Alpha Omega Alpha were:

Winfield Scott, Shelbyville
William Crays, Indianapolis
Don Mattox, Terre Haute

A postgraduate course of intensive study in modern medical science for practicing physicians was conducted May 20-25 at the Indiana university medical center in Indianapolis. Doctors from all parts of Indiana and other states attended the postgraduate course.

Combined with classroom instruction and clinical work were lectures by leading physicians in the United States who came to Indianapolis to address evening sessions of the postgraduate course. Emphasis in instruction was placed on clinical presentation, the entire school of medicine, including the Indiana university hospitals and the City hospital, being available for the postgraduate course.

A feature of this year's postgraduate course was open forum discussions on active medical topics and reviews of topics in which particular interest was shown. Classroom and clinical instruction was by the faculty of the I. U. school of medicine.

Evening sessions four times during the week were addressed by nationally-known doctors, in-

cluding Dr. Walter L. Bierring, president of the American Medical association and state commissioner of public health in Iowa. A meeting Monday evening at the Riley hospital for a banquet, followed by a public address by Dr. Bierring on "Progress in Internal Medicine" was for the secretaries of county medical societies in the state. Dr. A. M. Mitchell, Terre Haute, chairman of secretaries of the state association, presided.

Dr. T. G. Orr, chief surgeon at Bell Memorial Hospital, University of Kansas, spoke Tuesday evening. A homecoming program for graduates of the I. U. school of medicine was Wednesday evening, with Dr. A. R. Barnes, leading heart authority at the Mayo Clinic, and a graduate of Indiana university, as the guest speaker. Dr. Preston Kyes, head of the University of Chicago immunology department, spoke Thursday evening.

SOCIETIES AND INSTITUTIONS

COUNTY MEDICAL SOCIETY REPORTS

CASS COUNTY MEDICAL SOCIETY met at Logansport, May seventeenth. Dr. H. F. Dunlap of Indianapolis talked on "Atypical Hyperthyroidism." Attendance numbered twenty-five.

* * *

CLAY COUNTY MEDICAL SOCIETY members met at the Clay County Hospital, Brazil, May twenty-seventh, for a dinner meeting, following which Dr. W. D. Little of Indianapolis presented a paper on "Unusual Abdominal Diseases."

* * *

DAVIESS-MARTIN COUNTY MEDICAL SOCIETY met at the Daviess County Hospital, May twenty-eighth. Dr. H. H. Wheeler of Indianapolis presented a paper on "Carcinoma of the Rectum."

* * *

DEARBORN-OHIO COUNTY MEDICAL SOCIETY members were hosts to the annual meeting of the Fourth District Society, May sixteenth, at Rising Sun.

* * *

DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY members held their annual picnic, June nineteenth, at the farm of Dr. Will C. Moore near Yorktown.

* * *

FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY held a meeting at the McFarlan Hotel, May fourteenth. Dr. Charles P. Emerson of Indianapolis was the principal speaker. His subject was "The County Medical Society." Attendance numbered seventeen.

Physicians of Brookville were hosts to members of the Fayette-Franklin County Medical Society for the last meeting of the season, at Magnesia Springs, June eleventh. Dr. Herman G. Morgan of Indianapolis discussed "Health Factors in Community Life."

* * *

FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY members enjoyed their thirteenth annual Wabash River catfish dinner at Covington, June sixth. Dr. Edward B. Ruschli of Lafayette presented a discussion of "Fractures of the Hip."

FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY met at the Chamber of Commerce, May twenty-first, for annual election of officers, which resulted as follows: President, H. A. Ray; vice-president, Juan Rodriguez; secretary, W. W. Duemling; treasurer, E. L. Cartwright; Board of Censors, H. M. Senseny; delegate to state convention, J. L. Wyatt; alternate delegate, M. B. Catlett.

The annual stag party and golf tournament of the Fort Wayne Medical Society was held at the Fort Wayne Country Club, June eighteenth.

* * *

GIBSON COUNTY MEDICAL SOCIETY members met at the Emerson Hotel, Princeton, May thirteenth, for a dinner meeting. Dr. Charles O. Richey of Evansville was the principal speaker, his subject being "Ano-Rectal Diseases." Committees were appointed to work out two suggestions: (1) the county speakers bureau, and (2) medical society advertising or educational campaign. Attendance numbered twenty-two.

At the June tenth meeting of this society, Dr. Thomas Reitz of Evansville presented a paper on "'Myocardial Insufficiency." Attendance numbered twenty-six. There will be no meeting in July.

* * *

GREENE COUNTY MEDICAL SOCIETY held a meeting at the Freeman-Greene County Hospital, in Linton, May eighteenth. Dr. August Knoefel of Terre Haute talked on "'Fractures and Their Treatment."

* * *

HAMILTON COUNTY MEDICAL SOCIETY members met at Sheridan, May fourteenth. Dr. Ralph Lochry of Indianapolis talked on "X-ray in General Medicine." Twelve members and five visiting dentists were present. Thomas A. Hendricks, executive secretary of the State Association, explained the present status of social security legislation.

The June eleventh meeting of the Hamilton County Medical Society was held at Noblesville, with Dr. Harold F. Dunlap of Indianapolis as principal speaker. Thirteen members and six visiting dentists were in attendance.

* * *

HENDRICKS COUNTY MEDICAL SOCIETY met in Danville, May twenty-fourth, with Dr. Carl Habich of Indianapolis as principal speaker. His subject was "Gonorrhea in the Female."

* * *

HENRY COUNTY MEDICAL SOCIETY met at the Henry County Hospital, May sixteenth, to hear Dr. B. W. Rhamy of Fort Wayne talk on "Laboratory Findings." Dr. Rhamy's discussion included special reference to the various pregnancy tests. Attendance numbered twenty-two.

* * *

INDIANAPOLIS (MARION COUNTY) MEDICAL SOCIETY held its May twenty-first meeting at St. Vincent's Hospital. Papers were presented by Dr. Henry Beckman on "Pelvic Deformities in Labor," Dr. James Balch on "Pathology of the Kidney," and Dr. Karl Ruddell on "Conservative Treatment of Cancer of the Rectum."

The May twenty-eighth meeting was a social meeting at the Athenaeum, and on May twenty-ninth the fourth annual Indianapolis Medical Society golf tournament was held at the Speedway Golf Course.

* * *

JASPER-NEWTON COUNTY MEDICAL SOCIETY members were guests of M. D. Gwin at Rensselaer, May twenty-first. Dr. Paul Starr of Chicago discussed "Recent Research in Endocrinology."

* * *

JAY COUNTY MEDICAL SOCIETY members heard Dr. L. G. Zerfas of Indianapolis talk on "Deficiency Diseases" at their June seventh meeting, held at the Portland Country Club.

JEFFERSON COUNTY MEDICAL SOCIETY met at the Hillside Hotel, Madison, May twenty-seventh, with Dr. J. M. Townsend of Louisville, Kentucky, as speaker. His subject was "The Irritable Female Bladder and Urethra." Dr. Loveman of Louisville discussed "Practical Considerations, Diagnosis and Treatment of Commoner Skin Conditions," and a film, "Malaria," was shown. Attendance numbered fourteen.

* * *

LAPORTE COUNTY MEDICAL SOCIETY members held a dinner meeting in LaPorte, May sixteenth. Dr. Chauncey C. Maher presented a paper on "Methods of Diagnosis and Treatment of Heart Disease." Attendance numbered twenty-six.

* * *

LAWRENCE COUNTY MEDICAL SOCIETY members heard Dr. Phillip Barbour of Louisville, Kentucky, at the meeting in Bedford, June fifth. Dr. Barbour's subject was "Acute Abdomen in Children."

* * *

MARSHALL COUNTY MEDICAL SOCIETY members met at the Plymouth Country Club, May fifteenth, for an afternoon and evening meeting. Golf in the afternoon, dinner, and a scientific program were enjoyed by physicians from St. Joseph, Kosciusko, Fulton, and Elkhart counties. Dr. W. D. Gatch of Indianapolis presented a paper on "The Small Intestine." Attendance numbered sixty-three.

* * *

PARKE-VERMILLION COUNTY MEDICAL SOCIETY members met at Clinton, May fifteenth. Dr. Arthur Micheli of Indianapolis talked on "Maternal and Child Welfare." Attendance numbered fourteen.

* * *

ST. JOSEPH COUNTY MEDICAL SOCIETY members met at Healthwin Hospital, May eighth, to hear Dr. J. H. Stygall of Indianapolis discuss "Differential Diagnosis of Chest Conditions." Eighty members and four guests were present. Dr. Robert Sanderson of Healthwin Hospital entertained with the annual dinner meeting.

On May twenty-second, the St. Joseph County Medical Society held its meeting at the Erskine Golf Club. This was the annual doctors' party. The afternoon was spent in playing golf, and in the evening there was dancing. About one hundred twenty-four were present, including fifty-seven members, their wives and guests.

On May fifth twenty members of the St. Joseph County Medical Society attended the meeting of the Marshall County Medical Society at Plymouth.

* * *

TIPPECANOE COUNTY MEDICAL SOCIETY members met at Clarks Hill, June eleventh, for a dinner meeting. Dr. E. E. Padgett of Indianapolis and O. W. Stair of Lafayette were principal speakers. Dr. Padgett discussed "Diagnosis and Treatment of Ectopic Pregnancy," and Mr. Stair discussed the need of a professional business and collection bureau. Attendance numbered thirty-three.

* * *

VIGO COUNTY MEDICAL SOCIETY members met in the Union Hospital at Terre Haute, May fourteenth. Speakers were Dr. A. W. Cavins, who presented a report on "Scarlet Fever Immunization," and Dr. A. F. Knoefel, who described a new apparatus for blood transfusion by the citrate method. A moving picture on "Malaria" was presented through the courtesy of the Winthrop Chemical Company.

* * *

WAYNE-UNION COUNTY MEDICAL SOCIETY members met at the Richmond-Leland Hotel, May twenty-third. Dr. Louis E. Barron of the Ohio State University School of Medicine presented a paper on "Physiology of Stomach in Relation to Disease." Attendance numbered thirty-five.

* * *

WHITLEY COUNTY MEDICAL SOCIETY held a meeting in Columbia City, May fourteenth. Dr. Robert Meiser of Huntington presented a paper on "Sinusitis in Children."

THIRD DISTRICT MEDICAL SOCIETY

The Third District Medical Society met in Corydon, Indiana, at ten o'clock, in the new Court House. Dr. George Dillinger, French Lick, presided. Forty-four physicians registered, and many more were guests.

Dr. Charles Emery, Bedford, read an instructive paper on "Tannic Acid Treatment of Burns." Discussed by Dr. Carl Schoen and others.

Dr. Donald Colglazier, Salem, read a paper on "Hematology in General Practice." Discussed by Dr. H. K. Wilbur et al.

Dr. James O. Ritchey, Indianapolis, presented an intensely interesting paper on "Pulmomary Complications of Influenza." Drs. P. H. Schoen, William Moore, and others gave interesting discussions.

Hon. Lew M. O'Bannon addressed the banquet meeting giving an eloquent account of early Indiana history, centering around Corydon.

R. L. Sensenich, South Bend, discussed "Medical Economics." All enjoyed the president-elect's masterful discourse.

Dr. R. L. Harris, New Albany, gave an interesting history of early pioneers in medicine.

Our State President, Dr. W. J. Leach, New Albany, gave a short talk, and our genial executive secretary, Tom Hendricks, Indianapolis, also favored the meeting with a short talk.

Altogether, it was one of the best meetings in many years in attendance, interest, entertainment and good fellowship.

Salem was chosen for the next meeting. The election of officers was inadvertently overlooked.

GEORGE DILLINGER, President.
FRED BIERLY, JR., Secretary.

FOURTH DISTRICT MEDICAL SOCIETY

The Fourth District Medical Society met at Laughery Club near Rising Sun, May 16, for its thirty-first annual meeting.

The scientific session was honored with a talk by Dr. H. L. Schriver, Cincinnati, on "Some Economic Problems Confronting the Physician." Dr. W. B. Adams presented a paper on "Glandular Therapy"; Dr. D. D. Dickson, "Obstetrical Analgesia," and Dr. F. S. Downey discussed "Sciatica."

Judge William D. Ricketts was the speaker for the banquet in the evening. Music was supplied through the courtesy of the Old Quaker Distillery Corporation.

Golf was enjoyed in the morning and the ladies were entertained at bridge in the afternoon. Dr. Leach and Tom Hendricks were with us for the evening session. Forty-two members and their wives were present at this meeting.

Officers elected for next year were Dr. P. C. Bentle, Greensburg, President; Dr. W. H. Stemm, North Vernon, Vice President; Dr. Charles Overpeck, Greensburg, Secretary and Treasurer. Dr. M. C. McKain, Columbus, was elected Councilor for this district.

EDWIN L. LIBBERT, M. D., Secretary.

SIXTH DISTRICT MEDICAL SOCIETY

May 9, 1935.

Rushville City Library, 10:00 A. M.

Business Meeting:

Secretary and Treasurer's report accepted. Committees named.

Address of Welcome, Presented by Dr. R. Shanks, of Rushville.

First Paper: By Dr. Stanley Gordin, of Connersville, on "Uterine Hemorrhage." Outlining the causes, pathological states, symptoms, and diagnosis. This paper was interestingly and completely presented. Discussion: Dr. Frank H. Green, Sr., and Dr. J. E. Walther.

Second Paper: By Curtis Hoffman, of Richmond, on "Deficiency Diseases of Children."

1. Vitamin A—Deficiency, Night Blindness; Symptoms, Keratinization; Source, Cod Liver Oil and Green Vegetables.
2. Vitamin B—Deficiency causes Beri Beri
3. Vitamin C—Deficiency causes Scurvy
4. Vitamin D—Deficiency causes Rickets
5. Vitamin G—Deficiency causes Pellagra
6. Deficiency Oedema
7. Coeliac Disease

8. Purpura
9. Acrodynia

This paper was very comprehensive and informing.

Committee on Nominations: Dr. J. E. Keeling, Waldron; Dr. F. E. Ferrell, Fortville, and Dr. Curtis Hoffman, Richmond.

Afternoon Session:

Committee Report: President, Dr. Joseph Allen, Greenfield; Secretary-Treasurer, Dr. F. H. Green, Jr., Rushville.

Motion to elect unanimously the above named officers.

Third Paper: By Dr. D. Inlow, Shelbyville, on "Future of Surgery." Does not predict advance in technique. Field of surgery changing. This discussion thoroughly covered the subject and brought out new angles of thought along these lines.

Fourth Paper: By Dr. W. U. Kennedy, Newcastle, on "Health Insurance." An explanation as it has been presented at present.

Motion to telegraph Senators and Representatives that Sixth District goes on record as being against the Wagner Social Security bill and the Epstein bill.

Motion—Talent for program can be obtained from outside the district.

EIGHTH DISTRICT MEDICAL SOCIETY

THE EIGHTH DISTRICT MEDICAL SOCIETY met at Anderson, May fifteenth, at the Elks Club.

Golf was played in the morning, and the trophy donated by the Madison County Medical Society was awarded Dr. Paul Nelson of Anderson. Dr. J. H. P. Gauss of Indianapolis won the trophy donated by the Hoosier Pharmacal Company, and other prizes were awarded to Dr. E. E. Hunt of Pendleton and Dr. A. C. Badders of Portland.

In the afternoon, the scientific program was presented with papers read by Dr. Frederick W. Rankin of Lexington, Kentucky, and Dr. Frederick A. Willius of Rochester, Minnesota. In the evening Dr. H. F. Dunlap of Indianapolis and Dr. John Pemberton of Rochester, Minnesota were the speakers.

Registration of physicians and guests totaled 102.

Officers will be elected at the fall meeting.

V. G. MCDONALD, M. D., *Secretary.*

ELEVENTH DISTRICT MEDICAL SOCIETY

The fifty-third semi-annual meeting of the Eleventh Councilor District Medical Society was held at Delphi, May fifteenth.

Minutes of the previous meeting were read and adopted.

Officers were elected as follows: President, George D. Balsbaugh, North Manchester, and Secretary-Treasurer, O. G. Brubaker, North Manchester.

Dr. W. W. Holmes of Logansport presented his presidential address.

Dr. E. E. Padgett of Indianapolis presented a paper on "Pros and Cons of Gall Bladder Disease."

Dr. L. M. Rosenthal of Chicago substituted for Dr. Max Cutler in presenting a paper on "Tumors."

Dr. C. L. Viney of Logansport presented a paper on "Fractures."

Dinner and entertainment in the evening completed the program.

Guests included Dr. Walter J. Leach of New Albany, president of the Indiana State Medical Association, and Mr. Thomas A. Hendricks.

The fall meeting will be held at Peru, October sixteenth.

O. G. BRUBAKER, M. D., Secretary.

INDIANA STATE MEDICAL ASSOCIATION

EXECUTIVE COMMITTEE

June 2, 1935.

Meeting called to order at 11:00 a.m.

Roll call showed the following present: W. H. Kennedy, M. D.; H. H. Wheeler, M. D.; W. J. Leach, M. D.; R. L. Sensenich, M. D.; A. F. Weyerbacher, M. D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary. Guest, V. K. Harvey, M. D.

Minutes of the meeting of April 14, 1935, approved.

The monthly statements of receipts and expenditures and reports of the budget for April and May for the Association committees and THE JOURNAL were presented.

Membership Report

Number of members on May 31, 1935	2,659
Number of members on May 31, 1934	2,594
Gain over last year	65
Number of members on Dec. 31, 1934	2,741

1935 Meeting at Gary

(1) Commercial exhibit notice sent out on May 23, 1935. Fourteen spaces out of twenty-six sold.

(2) The committee felt that the State Association should not take advertising for the state program.

Surety Bonds

Dr. A. F. Weyerbacher, treasurer of the Association, made a statement to the committee in regard to surety bonds.

Suggestion made by the treasurer that a bond committee be appointed to go to the bank each year and check up on the bonds of the Association. It was proposed that such a suggestion be contained in the treasurer's report to the House of Delegates.

Legislative and Legal Matters

(1) *Court decision on vaccination in Randolph county.* Report to be made later.

(2) Bill prepared for new welfare set-up. Editorial upon this appeared in May JOURNAL.

Letter from Leo X. Smith, attorney for the Indiana Township Trustees Association, and other communications complimenting the committee upon the battle being made by the State Association against the control of welfare activities by social service workers brought to the attention of the committee.

(3) *Proposed legislation to increase the number of veterans' hospitals.* Dr. Sensenich reported that there would be little new construction. The problem of facilities to take care of colored veterans and veterans suffering from nervous and mental diseases remains.

Indigent Sick

(1) Correspondence from Dr. F. S. Crockett in regard to the suggestion of Charles Marshall of the Governor's Relief Commission that medical fees be revised downward brought to the attention of the committee. The State Association has not been approached by the Relief Commission upon this subject.

(2) Letter from W. F. Draper, assistant surgeon general, to Dr. Crockett, which suggests that a new set-up for medical relief might be forthcoming, brought to the attention of the committee.

(3) Complaint received in regard to the methods employed by the relief director in Martin county.

(4) Letter from Bloomington physician concerning relief matters in Monroe county discussed by the committee.

Sickness Insurance

(1) Release prepared by the Bureau of Publicity opposing compulsory sickness insurance schemes caused favorable editorial comment and received considerable attention from the press throughout the state.

(2) Compliments received from within and without the state upon the material sent to each member of the Indiana State Medical Association by the Executive Committee giving the viewpoint of organized medicine on the sickness insurance problem.

(3) Auerbacher-Mitchell-Milbank correspondence. Kingsbury and Falk are out. Sydenstricker is on vacation and Mr. Milbank has offered to give the facts and figures collected by Mr. Sydenstricker and to lend Mr. Sydenstricker himself to the American Medical Association for any further study that the A. M. A. may desire to make upon sickness insurance.

(4) Report on the meeting at the American Medical Association on April 27, to discuss community medical service projects prepared by Dr. Alexander Cavins who represented the State Association at that meeting. Dr. R. G. Leland,

of the American Medical Association, suggests that this report be not published at the present time.

(5) Rosenwald Fund announces plan for the socialization of medicine. See page 1,912, May 25 issue of *The Journal of the American Medical Association.*

(6) A clinic similar to the Louisiana General Clinic, offering certain "free" medical services, proposed for Newcastle, Indiana. It is the belief that such a clinic will not be started in this state.

(7) Letter received from physician advocating sickness insurance. The Executive Committee asked that this communication be acknowledged.

(8) Pamphlets upon sickness insurance sent to juniors and seniors of the Indiana University School of Medicine by the Executive Committee. This is in accord with the suggestion of the Committee on Legislative Activities of the American Medical Association.

(9) The hospital insurance program of the Indiana Grand Lodge Knights of Pythias brought to the attention of the committee. As this has nothing whatever to do with paying the physician and as the patient is allowed to choose his own hospital and his own physician, the committee felt that the State Association had no interest whatsoever in this matter.

Graduate Educational Meeting

Report upon this meeting received by the committee.

Future plans for postgraduate work by the State Association discussed by the committee. The committee is to think these matters over and make a report at the next meeting.

Suggestion in Regard to High School Essays

Suggestion made by Dr. George V. Cring of Portland that a high school essay contest be conducted upon choosing your own family physician once again brought to the attention of the committee. The committee felt that there were many angles to this matter and perhaps it would be well to have Dr. Cring write out his plan concerning this suggestion in detail.

Crawford County Medical Society

Report made that Crawford County Society is an active organization once again.

Letter in Regard to Injection Treatment of Hernia

A letter sent out by a surgeon to commercial companies concerning the injection treatment of hernia, brought to the attention of the Executive Committee. The committee instructed the secretary to forward this letter to the local county medical society.

Complaint Regarding Tuberculosis Hospital Making X-Ray Pictures for the Public Below Regular Fees

The original complaint and correspondence from officials of the hospital turned over to Albert Stump for his opinion. Mr. Stump was to prepare an opinion upon this matter for THE JOURNAL.

Report upon Child Welfare Meeting at Washington

Dr. Verne K. Harvey, director of the Division of Public Health, made a report in person to the committee upon his recent trip to Washington where he attended a meeting of the Children's Bureau. Martha Elliott, M. D., head of the Bureau, said that it was up to each state to work out its own program upon maternal and infant welfare and health. All federal funds to be allotted and spent for child and maternal welfare are to be expended through the department of health in each state. Dr. Elliott commented favorably upon the Indiana set-up and particularly in regard to the cooperation of the medical profession and the nursing service in this state. Dr. Harvey suggested that a contact man between the State Division of Public Health and the local county medical societies be appointed to stimulate the work in this state. Dr. Harvey stated that he believed that a great deal of the fund could be expended for rural public health nursing service and asked that the State Association appoint an advisory committee on child hygiene which will act as a liaison committee between the State Board of Health and the physicians of the state. The Executive Committee felt that such a suggestion had a great deal of merit and Dr. Leach is to name such a committee within the near future.

Drive on Fraudulent Practitioners by St. Joseph County Medical Society

Letter received from the chairman of the legislative committee of the St. Joseph County Medical Society stating that a drive upon the fraudulent practitioners in that community is to be made by the society. Letter from Dr. William R. Davidson, secretary of the State Board of Medical Registration and Examination, brought to the attention of the committee. In this letter Dr. Davidson spoke of the difficulty in getting the injunction clause to stick. This matter was referred to Albert Stump, attorney for the Association, who is to write Dr. Davidson concerning his opinion in regard to the effectiveness of the injunction clause in the Medical Practice Act, Mr. Stump believing that, from the experience he has had, such clause is most effective.

American Medical Association Meeting

Report made that Mr. Will Braun, business manager of the American Medical Association, after a visit to Indianapolis decided that the hotel facilities were not adequate in this city for holding a meeting of the American Medical Association here. The Executive Committee felt that such an invitation should not be pressed unless the facilities were adequate.

Payment of Speakers' Expenses

Acknowledgment of the Bureau of Publicity of the ruling made by the Executive Committee at its April 14th meeting that expenses of speakers sent out by the bureau should not be paid, brought to the attention of the Executive Committee. In this acknowledgment the Bureau of Publicity felt that expenses should be paid for those men sent out by the Bureau of Publicity who are not in private practice. This exception was agreed to by the Executive Committee.

The Journal

(1) Report on advertising made.

(2) The committee ruled that THE JOURNAL should carry no professional cards unless the physician is a member in good standing.

(3) Apportioning of JOURNAL funds discussed further. This matter is to be taken up with Albert Stump and then discussed with the Collector of Internal Revenue, Mr. Will H. Smith.

There being no further business, the meeting was adjourned.

INDIANA STATE MEDICAL ASSOCIATION

BUREAU OF PUBLICITY

April 19, 1935.

Present: J. H. Stygall, M. D.; E. D. Clark, M. D.; and T. A. Hendricks, executive secretary. (Matters were taken up with William N. Wishard, M. D., chairman, at his home, following the meeting.)

Minutes of the meetings of March 21, March 29, and April 9 approved for signature.

Release, "Not in Indiana," approved for publication in May 6 papers.

Release for publication in April 29 papers, "Indiana Graduate Educational Meeting at Evansville," read and approved.

The bureau went on record approving the discontinuance of the clipping service on releases. This will save between $5.00 and $10.00 a month.

Article in the April number of the Indiana *Parent-Teacher* entitled, "The Home, the School, and the Doctor," approved by the bureau.

The following excerpt from the Executive Committee minutes was brought to the attention of the bureau:

"The committee discussed the policy which has been adopted by the Bureau of Publicity of paying from state funds the expenses of speakers who are asked to make talks by the Bureau of Publicity. It has been the rule of the bureau that whenever it has asked a man to speak in a locality different from the one in which he resides, the actual expenses of this speaker shall be paid by the bureau

if they are not paid by the local county medical society before which he talks. The Executive Committee feels that it is honor enough for any man to speak upon behalf of the State Association through the Bureau of Publicity and that expenses should not be paid. The secretary was instructed to inform the Bureau of Publicity of the feeling of the Executive Committee in regard to this matter."

The bureau agreed with the policy of the Executive Committee in this matter, with exceptions subject to the discretion of the bureau.

There being no further business, the meeting was adjourned.

AMERICAN ASSOCIATION OF THE HISTORY OF MEDICINE*

We who were intimately acquainted with the late Dr. A. W. Brayton recall his frequent comment: "It was a good meeting. I spoke." I wish to paraphrase that remark and report a very remarkable meeting which I attended on May 6th in Atlantic City, N. J., and which was a very good meeting in spite of the fact that I spoke.

I refer to the Eleventh Annual Session of the *American Association of the History of Medicine.* This society, a branch of the International Association which will meet in Madrid in September, 1935, organized by a mere handful of altruistic physicians, has grown in eleven years under the able and enthusiastic direction of its secretary, Dr. E. J. G. Beardsley, to a membership of somewhat over three hundred. It is devoted entirely to historical and cultural medicine and no clinical papers appear upon its program. Its annual meeting is held co-incidentally with the session of one of the larger medical organizations, this year with that of the Association of American Physicians.

Each annual session is dedicated to some physician of outstanding accomplishment and this year honored the memory of Joseph P. O'Dwyer. Dr. Chevalier Jackson was appropriately chosen to review the accomplishments of Dr. O'Dwyer and paid a glowing tribute to the memory of the man whose pioneer work in intubation of the larynx paved the way for the remarkable achievements of Jackson and his associates in bronchoscopy and endoscopy.

Dr. Esmond R. Long reviewed the work of Antonio Benivieni, "a pioneer pathologist of the fifteenth century," who antedated by three hundred years the master pathologist, Morgagni.

Dr. Bernard W. Weinberger, librarian of the dental section of the library of the New York Academy of Medicine, gave an illustrated lecture on the "Comparison of Houdon's Life Mask of George Washington with his Portraits" and literally painted for his audience a new picture of Washington.

Unquestionably the most interesting presentation was that of Harlow Brooks entitled "A Navajo Medicine Sing." Dr. Brooks has spent a great deal of time among the Navajos, and during a recent visit was asked to see a nineteen year old Indian girl who was desperately ill with pulmonary tuberculosis. When the hopelessness of the situation was explained to the family they chose to place the child under the care of the native medicine man. Dr. Brooks was privileged to see the ceremony which occupied five days and nights. He described in detail the incantations, the ceremonial fire, the native decoctions that were employed, and concluded with the statement that he was impressed with the intelligence and sincerity of the native doctor, and more particularly by the improvement in the morale of the patient, who had been given up to die by the civilized physician.

The evening session of the society was addressed by Dr. Walter C. Alvarez on medical folklore which he had learned during his residence in Old Mexico and China. Dr. Reginald Fitz delivered "A Belated Eulogy—To John H. Watson, M. D.," which proved to be a word picture of the Dr. Watson who collaborated so cleverly with Sherlock Holmes. It was a remarkable bit of extravaganza which "out-Doyled" Conan Doyle.

Dr. Henry E. Sigerist concluded the program with a description of "Tarantism," a form of major hysteria which affects the residents of a portion of southern Italy who think they have been bitten by a tarantula.

The American Association of the History of Medicine is at the present time undertaking the establishment of branch societies throughout the United States and has offered to Indianapolis the opportunity of establishing the first of these branches. The dues are $1.50 a year and for an additional dollar one is entitled to "Medical Life," the official organ of the society and the only English monthly publication devoted to the history of medicine.

The association invites to active membership any physician, teacher or layman who is interested in the development of cultural pursuits. It is to be hoped that Indianapolis will avail herself of the signal honor which the association is anxious to bestow, and that we may have an enthusiastic, active chapter organized during this summer and early fall.

EDGAR F. KISER, M. D.

*(Reprinted from Indianapolis Medical Society Bulletin, June, 1935.)

THE ATLANTIC CITY SESSION A. M. A.

(Continued from page 343)

that it is not interested in the legislative affairs of the House of Delegates except to lend support to its principles, and that it recognizes the American Medical Association's right to speak for the organized medical profession.

A resolution was adopted calling for the refusal of all advertising in the *Journal of the American Medical Association* and constituent journals offensive to the principles of the Association.

Reaffirming its action of 1925 and 1930, the House of Delegates approved physical examination as a requirement for the issuance of licenses to drivers of motor vehicles.

A resolution expressing the need of inspection and reclassification of medical schools was approved.

The teaching of medical economics in medical schools was recommended. A similar resolution presented by the Indiana delegation two years ago was approved and as a result courses in economics have already been established in sixty medical schools.

A resolution requesting that a committee be appointed to formulate standards for catgut sterilization was adopted.

Membership in more than one constituent society was declared to be in conflict with the provisions of the constitution.

Indiana members of the House of Delegates served on the following Committees: Committee on Miscellaneous Business, Dr. Don F. Cameron. Dr. R. L. Sensenich and Dr. F. S. Crockett are members of the Special Committee on Legislative Activities of which Dr. James W. Carey, San Antonio, Texas, is chairman.

ELECTION OF OFFICERS

Dr. James Tate Mason of Seattle was chosen president-elect.

Dr. Kenneth M. Lynch of Charleston, S. C., was elected vice president. Other officers elected were:

Dr. Olin West, Chicago, secretary; and Dr. Herman L. Kretschmer, Chicago, treasurer.

The election developed a struggle for Speaker of the House of Delegates between Dr. F. C. Warnshius of San Francisco, who had been re-elected annually to this office since 1922, and Dr. Nathan B. VanEtten of New York City. Dr. Warnshius failed of re-election by a close vote.

Dr. Harrison H. Shoulders of Nashville, Tenn., was elected vice speaker of the House of Delegates.

Kansas City, Missouri, was selected as the place of meeting for 1936.

The complete report of the House of Delegates appears in the June twenty-second and subsequent issues of the *Journal of the American Medical Association.*

MEETING TODAY'S CHALLENGE

(Continued from page 345)

then advised. If credit is passed and service agreed upon the patient signs an agreement, with a definite understanding as to the *total cost* and *manner* of payment. Payments are made at the bureau office. In many cases the bureau can secure tangible security or a co-signer on the agreement. There is no interest charge or extra cost to the patient.

Being controlled by the Indianapolis Medical Society, this plan assures the public of the honest attempt of these professional men to unite in constructive and progressive moves that will tend to prevent a lowering of the standard of their services through possible hasty and unscientific proposals. The plan assures the public that service will be rendered in keeping with a patient's economic circumstances and at the same time permits the doctors to be generous in their charity service.

It is an honest and worthy attempt to help the "in-between" person; to modify or properly proportion the financial barrier of cost for their treatment and give to this group of people the medical care they are properly entitled to receive at a cost which they can and are willing to pay.

The Indianapolis Medical Society is definitely proving that organized medicine is fully capable of handling its own economic problems without lessening efforts to promote scientific medicine.

WHAT ABOUT EIGHT-HOUR DAY FOR NURSES?

(Continued from page 348)

and physically. Physicians also appreciate the high incidence of tuberculosis occurring among private duty nurses of their acquaintance, and they are glad to promote measures calculated to improve the working conditions of any group of people.

The eight-hour day is coming!

Medical science, by shortening the periods of illness, has lessened the number of long cases on which a nurse formerly spent weeks with a slowly convalescing patient, at the same time getting reasonable rest and sleep. She now has, for the most part, acutely ill patients.

Modern transportation has spread the radius of travel so that homes, hospitals, nurses, and patients are brought closer together in space. The nurse need no longer "live on the job." These and other factors are bringing the eight-hour day nearer each week.

Do the nurses want it? Yes, the nurses want the eight-hour day, with the help and approval of the physicians whose helpers they are proud to be. We predict that when it comes in Indiana, the medical profession will see better qualified young women entering the nursing field, because one of the strongest objections that parents have to nursing as a vocation for their daughters is the irregular and unnatural lives they lead. Physicians will see a better and finer quality of nursing done by less worn special duty nurses, and they will also see less waste of nursing power through enforced idleness, long illness, and early death.

BOOK REVIEWS

BOOKS RECEIVED

CLINICAL LABORATORY METHODS AND DIAGNOSIS. A Textbook on Laboratory Procedures with their Interpretation. By R. B. H. Gradwohl, M. D., director of the Gradwohl Laboratories. 1,028 pages with 328 illustrations in the text and 24 color plates. Cloth. Price $8.50. The C. V. Mosby Company, St. Louis, 1935.

* * *

THE DOCTOR'S BILL. By Hugh Cabot, M. D. Introduction by A. Lawrence Lowell. 313 pages. Cloth. Price $3.00. Columbia University Press, New York City, 1935.

* * *

BOOKS REVIEWED

FAILURE OF THE CIRCULATION. By Tinsley Randolph Harrison, M. D., Associate Professor of Medicine, Vanderbilt University School of Medicine. 396 pages. Cloth. Price $4.50. The Williams and Wilkins Company, Baltimore, 1935.

In an introductory chapter, Harrison outlines briefly the history of cardiology from Hippocrates to Starling. During the past two decades cardiologists have interested themselves particularly in the heart as a power machine, and it is from the standpoint of the inadequacy of this machine that he discusses the failure of circulation. His premise upon which the entire work is based is epitomized in the following statement: "The important thing is to realize that, aside from angina pectoris, which is in the final analysis a local circulatory disturbance, the general circulatory disorders may be divided into three types, of which one is characterized by increased activity, another by decreased response, and the third by inefficient performance of the fundamental function of supplying blood to the tissues."

The types of failure he characterizes as hyperkinetic, hypokinetic, and dyskinetic, and in a very well ordered way, presents the pathological anatomy behind these various syndromes. Dr. Harrison's book is not one to be leafed through lightly, but is rather a work for the serious-minded physician to ponder and digest. It would be splendid if every junior medical student might read this book carefully before undertaking the clinical consideration of heart disease.

USEFUL DRUGS. A list of drugs selected to supply the demand for a less extensive materia medica with a brief discussion of their actions, uses and dosage. Edited by Robert A. Hatcher, Ph. M., Sc. D., M. D., and Cary Eggleston, M. D. Prepared under the direction and supervision of the Council on Pharmacy and Chemistry of the American Medical Association. Ninth edition. Cloth. Price, 60 cents. Pp. 203. Chicago: American Medical Association, 1934.

This book represents a valuable and increasingly effective phase of the efforts of the Council on Pharmacy and Chemistry on behalf of rational therapeutics. Since its first appearance in 1913 it has become a recognized work in its field. It has been adopted as a textbook by teachers of therapeutics in the best medical schools and by various examining and licensing boards. The various editions and revisions since that time have been undertaken in the effort to keep it abreast with the advance of therapeutics. Drugs that have become obsolete have been deleted, and others the value of which has become established have been added. The statements of actions, uses and dosage of the various drugs are revised after discussion by the whole Council. They represent the latest and best results of therapeutics and pharmacologic revision. The present edition is in line with the constant aim of the Council, which has been to present a selective and informative yet comprehensive compendium of the more useful preparations in the medical armamentarium. There have been some additions to the list of drugs and a few have been deleted. Individual descriptions show evidence of careful editing. Typographically the text is an improvement on previous editions by reason of more generous spacing, which makes it easier on the eyes. As it stands, the book is an authoritative, intelligent, critical and entirely adequate textbook for the use of teachers and examiners, as well as for reference by the busy practitioner. It is an integral and constructive part of the Council's efforts in the promotion of the rational use of drugs.

(Reprinted from The Journal of the American Medical Association, March 9, 1935.)

* * *

ECONOMIC PROBLEMS OF MEDICINE. By A. C. Christie, M. S., M. D., Professor of Clinical Radiology, Georgetown University Medical School, and member of the Committee on the Costs of Medical Care. 242 pages. Cloth. Price $2.00. The Macmillan Company, New York, 1935.

In these days of agitation and controversy over the future of the practice of medicine, it is refreshing to find a book which sets forth the problem on such a common sense basis. Books on economic problems often prove rather dull reading for the average physician. Perhaps this is in confirmation of the allegation that medical men, as a rule, are poor business men, and that they prefer to leave the settlement of their economic and social problems to others. Dr. Christie brings to his work a background of considerable experience as a member of the Committee on the Costs of Medical Care, and as Chairman of a Sub-Committee on Information of the Committee on Medical Economics of the Medical Society of the District of Columbia, as well as a foundation of long interest in the economic and social aspects of the practice of medicine. In the present volume of 229 pages he supports his context with a bibliography that contains the best of references on the subject.

Laying a solid foundation on the bed rock of medical ethics, Dr. Christie builds his structure of medical economic problems on the considerations of their relationship to medical education, private practice, the hospital, medical organizations, the community, workmen's compensation laws, health insurance, industrial medicine, and the newer methods of practice already under trial. His final chapter deals with essential considerations in the formation of any comprehensive plan of medical care.

He would avoid controversy with social service groups by a better understanding of their problems, and seek cooperation through a more willing attitude on their part to understand ours. His consideration of the various problems besetting medical practice as it deals with the different situations confronting the physicians today is based on clear logic and is supported by good common sense and a wealth of vital facts. His final conclusions need hardly be considered prophetic by those who have some interest in these problems, since the necessity for some changes are apparent and the large number of legislative plans advocated point the way. He rightfully reserves to the medical profession the leadership in the working out of these plans as well as their executive control.

This is a splendid book and should form the text for any course in medical economics such as has been recommended for inclusion in the curriculum of our medical schools. The subject matter is well classified, the printing is easy on the eye, and the contents are interesting and instructive. It is an extremely practical book and should be read with great profit by every practitioner of medicine.

* * *

PHYSIOLOGY IN MODERN MEDICINE. By J. J. R. Macleod, M. D., LL. D., D. Sc., F. R. C. P., F. R. S., Regius Professor of Physiology in the University of Aberdeen, Scotland; formerly Professor of Physiology in the University of Toronto, Canada, and in the Western Reserve University, Cleveland, Ohio. Assisted by Philip Bard, M. D.; Edward P. Carter, M. D.; J. M. C. Olmsted, M. D.; J. M. Peterson, M. D.; and N. B. Taylor, M. D. Seventh edition, 1,154 pages with 297 illustrations, including 7 plates in colors. Cloth. Price $8.50. C. V. Mosby Company, St. Louis, 1935.

That this is the seventh edition of a book of this type must be encouraging to its author. It also assures the buyers that it is being continually kept up to date.

The statement is made in the preface that the purpose of the book is to serve as a guide to the clinical application of physiology and biochemistry. Where formerly "biochemistry" was used in the title, now only "physiology" is present. Biochemistry is referred to in this edition only when needed better to explain the problems of animal function. The subject matter covers the entire field of physiology in relation to medicine, but that apparent step-child of medical writing, the physiology of reproduction, is disposed of in thirteen pages which deal chiefly with endocrinology rather than sex physiology of the growing individual.

The practicing physician would no doubt advance his art of medicine further if he would acquire the physiological approach as suggested here. The attitude towards disease is too often merely empirical, and an illness is too often treated as a name of a disease rather than in terms of an accurate knowledge of the underlying upset physiological processes.

This book is an invitation to review and better understand clinical medicine in the light of the most recent advances in physiology. While valuable to the student in the medical school, it especially fills the needs of the advanced student and the medical practitioner.

* * *

MODERN MOTHERHOOD. By Claude Edwin Heaton, M. D., with introduction by Hazel Corbin, director of Maternity Center Association, New York. 271 pages. Cloth. Price $2.00. Farrar and Rinehart, Inc., New York, 1935.

This excellent book will give to the lay person a liberal education in medicine in relation to childbirth. It perhaps will be wise for the average practitioner to read such a book so that he will be informed of what the pregnant mother is going to expect of him. However, the care this book tells her she should have is that which she deserves. While, in general, treatment is referred to the physician who will care for her, too many times treatments are advised, such as ammoniated mercury ointment for certain skin conditions, and feeding formula information. It would seem that diagnosis of skin lesions and the treatment should be left to the physician. Most all manufacturers of baby foods have seen the wisdom of leaving feeding instructions off the can. It seems unwise and unnecessary in such a book to encourage a mother to do her

own calculations. The author is only keeping up an evil rather than advising against trouble.

There is a good bibliography and a glossary. In general, the book dispels false fads and fallacies and points out the sensible and safe. The chapter on mental hygiene in maternity is excellent. Practically every angle of the problem of motherhood is discussed, including the expectant father, what maternity care should cost, how to choose a doctor, and a history of the evolution of obstetrical care and of the condition of obstetrical practice in America.

The author evidently is not sure of the reliability of the Ogino-Knaus theory. He apparently believes eugenics as a science is much overrated and believes that when the economics situation is such that all have equal opportunities in a happy environment much of the problem of disease, and especially maternal and child care, will be simplified.

He concludes: "The problem of maternal welfare in the United States is primarily a social and an economic one. Expectant parents who are able to avail themselves of the advantages of modern obstetrics may contemplate having a baby with serenity and confidence."

ABSTRACTS

EVALUATION OF DINITROPHENOL AS AN AID IN WEIGHT REDUCTION

JAMES M. STRANG and FRANK A. EVANS, Pittsburg (*Journal A. M. A.*, June 1, 1935), observed six patients over periods varying from fifty-four to 115 days or a total of 437 days. These patients were all women in good health apart from the obesity and certain dependent disabilities such as varicose veins and painful knees. The six paients on admission weighed from 77.6 to 150.5 Kg. They lost a total of 99.4 Kg., or an average of 16.6 Kg. each. For 190 days of the study the patients received approximately "maintenance" diets, on which they lost 24.8 Kg. For 102 days, or 54 per cent of this period, they received an average daily dose of 250 mg. of dinitrophenol. In the remaining 247 days in which they were on "reduction" diets they lost 74.6 Kg. For ninety days, or 36 per cent of this reduction diet period, they received an average daily dose of 290 mg. of the drug. The averages of the individual rates of weight loss were 130 Gm. per day and 290 Gm. per day, respectively, for these two periods. It was found that dinitrophenol in therapeutic doses produced an increase of oxygen consumption of approximately 20 per cent. Whether this disappearance of oxygen is a reflection of increased heat production or whether there is an alteration of the normal oxygen utilization due to the toxic action of the drug is not clear. It appears that there is a tendency of the body to store water under the influence of the drug. The drug readily produces skin reactions varying from moderate warmth and sweating to a toxic dermatitis. The question of a specific action on the sweat glands has been raised. The skin reactions do not parallel the amount of drug ingested or the level of increase of oxygen consumption. As the method of producting weight loss by increasing the rate of energy output, the drug leaves much to be desired theoretically. Practically, in the authors' series of patients no consistent augmentative effect of the drug on the rate of the true weight loss could be demonstrated in association with either the maintenance or the reduction diets employed. The influence of dinitrophenol on the negative energy balance is small in comparison to what can be secured by even moderate diets.

PRODUCTION AND SOLUTION OF URINARY CALCULI: EXPERIMENTAL AND CLINICAL STUDIES

CHARLES C. HIGGINS, Cleveland (*Journal A. M. A.*, April 13, 1935), observed that urinary calculi develop in albino rats sustained on a diet deficient in vitamin A, and alkalinuria and keratinization of the urinary tract are constant. Infection of the urinary tract is frequent in the later stages of the experiment. The calculi are composed chiefly of calcium phosphate. The addition of vitamin A causes disintegration and solution of the calculi experimentally produced in rats. The chemical conditions necessary for the formation of calculi are produced by vitamin A deficiency. An acid ash diet high in vitamins, especially vitamin A, is suggested as a prophylactic measure to prevent the recurrence of calculi in patients who have had urinary lithiasis, and the part played by vitamin A in the diet to prevent primarily calculous disease is important. Since these experimental investigations it has been the routine procedure at the Cleveland Clinic to administer to patients who have been operated on for urinary calculi a special acid ash diet high in vitamins, especially in vitamin A. Vitamin A is also added in the form of cod liver oil or halibut liver oil, a teaspoonful three times a day. The patient is instructed to test the urine morning and night with litmus paper, and on each visit to the clinic a urinalysis, including the ph, is made. Therapeutic measures, such as the eradication of renal infection or the elimination of stasis in the urinary tract, were not neglected. On this regimen no calculi have recurred, but insufficient time has elapsed to warrant definite and final conclusions as to the efficacy of this prophylactic measure. Seven patients with renal calculi, either unilateral or bilateral, who have refused operation or in whom surgical treatment was not feasible have been taking a similar diet. In each of two instances a small stone in the lower calix of the kidney too large to pass spontaneously has disappeared entirely within four months. In two patients multiple large bilateral calculi have decreased definitely in size within thirteen months. Another patient had a large silent stone completely filling the left kidney; after the patient had taken the high vitamin diet for six months 323 small calculi were passed. The other two patients have been on the diet for only a short time. Several other physicians have used the acid ash deit and vitamin A in the treatment of their cases and the collected series in which calculi have disappeared now numbers eighteen.

FEVER THERAPY: RESULTS FOR GONORRHEAL ARTHRITIS, CHRONIC INFECTIOUS (ATROPHIC) ARTHRITIS AND OTHER FORMS OF "RHEUMATISM"

PHILLIP S. HENCH, CHARLES H. SLOCUMB AND WALTER C. POPP, Rochester, Minn. (*Journal A. M. A.*, May 18, 1935), state that fever must serve some very useful purpose, or nature would not have retained it so tenaciously as a reaction process to invasion of harmful substances, was the conclusion of Welch and others who, in the past forty years, have fostered a return of the hippocratic idea of fever's beneficence. The current development of fever therapy is a testimonial to the wide acceptance of their views. Under certain conditions, and within certain limits, hyperthermia is a state not to be prevented but to be fostered. Various methods for its more or less safe production are being increasingly elaborated. The day of pyretotherapy, of "friendly fever" is already well advanced. The authors' survey of experiences with fever therapy for various type of arthritis indicates that results have been quite variable. No one method has been proved clearly superior to all others, and a laudable process of simplification of methods is in progress. Of cases of chronic, nonspecific infectious (atrophic) arthritis, "cures" have been reported in from 0 to 25 per cent, marked relief in from 0 to 7 per cent, moderate relief in from 25 to 50 per cent, and no relief in from 13 to 75 per cent. They have estimated that of the total number of patients treated an average of about 10 per cent were reported as becoming symptom free, about 25 per cent reputedly obtained marked relief, about 35 per cent obtained moderate relief, and about 30 per cent obtained no relief. The results in their cases have not equaled these general averages, but have ap-

proximated the more modest estimates. Of their sixty patients with chronic infectious arthritis none were completely relieved, 18 per cent were markedly relieved, 12 per cent were moderately relieved, 20 per cent were but slightly benefited, and 50 per cent were not relieved. Thus a total of 30 per cent received significant benefit and 70 per cent got little or no relief. The value of fever therapy for chronic infectious arthritis cannot yet be fully appraised. Further clinical experience is necessary as well as further investigation on the thermal death time of supposedly etiologic bacteria. In the meantime a trial of fever therapy in selected cases is justified. Of cases of gonorrheal arthritis "cures" have been reported in from 50 to 100 per cent, with complete relief occurring in a total average of 92 per cent. Only occasional patients are not markedly benefited. The authors' results in sixteen cases of gonorrheal arthritis confirm those of others. About 90 per cent of the patients were essentially cured or markedly relieved. Adequate fever therapy seems to provide a direct sterilizing action on affected joints. Since one may expect from adequate fever therapy a fairly rapid and essentially complete recovery in the majority of cases of acute gonorrheal arthritis (without the articular residues that so frequently occur in spite of other measures), and since even in cases of chronic, but still active, gonorrheal arthritis considerable benefit can often be obtained, the prompt use of this form of therapy is recommended.

LIMITATIONS OF USE OF SILVER NITRATE IN PREVENTION OF OPHTHALMIA NEONATORUM: REPORT OF SURVEY OF NEARLY 28,000 HOSPITAL BIRTH RECORDS AND 2,000 CASES OF OPHTHALMIA NEONATORUM

LOUIS LEHRFELD'S, Philadelphia (*Journal A. M. A.*, April 27, 1935), survey of the records of the department of public health of Philadelphia for the past fifteen years shows that ophthalmia neonatorum has not materially decreased despite the generalized application of Credé's method of antisepsis. Among 27,873 infants 632 cases of ophthalmia neonatorum were found, an incidence of 2.2 per cent. The most striking fact of the survey is that expectant mothers known to have gonorrhea have not been actively treated for the disease because of the implicit confidence placed on the efficacy of a single drop of silver nitrate in the prevention of gonorrhea of the eyes of the new-born. The survey also shows that a large proportion of mothers who did not have positive smears delivered babies with positive gonorrheal ophthalmia. This is but a reflection of the need for more deliberate and careful technic in the examination of the expectant mothers for infection. Nowhere in medicine has silver nitrate, either 1 or 2 per cent, been heralded as a specific gonococcocide, in view of the difficulty of a single drop reaching all infected surfaces. The fundamental principles of all public health measures deal with the control of disease at its source. Yet in ophthalmia neonatorum all health officers are content to wait until the infant has been exposed to the disease and place full reliance on the prevention after exposure. The records of this survey point conclusively to the fact that the control of this disease will depend entirely on the modification of present laws requiring the treatment not only of gonorrhea but also of all non-specific infections of the vaginal tract of the expectant mother during the period of pregnancy. The survey points conclusively to the fact that the Negro race contributes the larger proportion of the cases of ophthalmia neonatorum and that vaginal antisepsis is particularly important in hospitals in which a large proportion of this race is confined. The author recommends the following procedures for the prevention of ophthalmia neonatorum: 1. Superficial sterilization of the birth canal before delivery of all hospital clinic patients, particularly Negroes. 2. Thorough flushing of the eyes of the new-born with sterile boric acid solution, a 3-ounce (90 cc.) solution being used for each eye, followed immediately by instillation of 0.5 per cent solution of silver nitrate. This should be repeated on three successive days. On the fourth and subsequent days during the first two weeks in the hospital or at home the eyes should be flushed thoroughly by the attending physician with sterile boric acid solution. 3. Compulsory reporting of all cases of ophthalmia neonatorum and the compulsory reporting of the results of the treatment at the end of six weeks. 4. Change in state laws to include prenatal antisepsis.

EMBOLISM: FOLLOWING INSTRUMENTATION AND INJECTION OF OIL INTO URINARY BLADDER

In spite of the fact that in their case there is a direct chain of circumstance proceeding from the instrumentation and oil injection through rather suggestive symptoms to the death of the patient, JESSE L. CARR and CLARK M. JOHNSON, San Francisco (*Journal A. M. A.*, June 1, 1935), are still at a loss to explain why a small amount of oil entering the blood stream in this way should cause death when it is known that larger amounts can be injected intravenously without causing definite symptoms. As Lehman and Moore suggest, the entrance of fat into the blood stream cannot be definitely regarded as disease producing in a direct way, and they indicate that this fat entering in abnormal circumstances may not be the fat which causes the embolism. They suggest rather that such fat introduced artificially must in some way associate pathologically with the free neutral fat in the blood stream, which is there physiologically. In the authors' case there was no indication that the fat metabolism was upset or that the emboli seen in the various organs described are composed of other fat than that which was accidentally injected, although, of course, it was not possible to analyze these droplets for determination of their specific formulas. Nothing should be injected into the traumatized posterior uretha that cannot be safely injected intravenously.

PROFESSIONAL PROTECTION

SINCE 1899 SPECIALIZED SERVICE

A DOCTOR SAYS—

"I am so thankful to be in such good hands with my protection. I think I am one of your oldest clients and this is my first time in court after practicing some fifty years."

THE MEDICAL PROTECTIVE COMPANY

OF FORT WAYNE, INDIANA

WHEATON, ILLINOIS

CARE OF THE DROWNING PATIENT

(Continued from page 344)

glass held near the mouth will steam with each expiration if there is an exchange of air. If the air-way is blocked, attempt to break up the obstruction with the fingers. An air-way tube is useful if at hand.

INHALATION. Doubt has been raised as to the value of carbon dioxide-oxygen mixtures in drowning. Drinker says there is no evidence of benefit, but Henderson favors its use. The H-H Inhalator, which merely supplies the gas mixture during prone pressure, may be used if available. It certainly can do no harm.

Resuscitators that produce artificial respiration through a face mask by means of positive and negative pressure are not recommended.

WHEN PAST HELP? An important question is, "How may an examination show whether artificial respiration would be fruitless or not?" Even in the face of absent pulse, heart sounds, and other signs of life, victims sometimes have been revived by the stubborn application of prone pressure.

All too frequently a physician pronounces a patient dead and prone pressure is continued to recovery. This is apt to be decidedly embarrassing. One authority will not quit until he severs an artery in the wrist and sees for himself if there is any circulation. Certainly repeated examinations should be done before prone pressure is stopped.

RESUME IF RESPIRATION STOPS. After apparent recovery the breathing may fail repeatedly. Watch carefully for a cessation of respiration after revival. If the breathing stops, instantly resume prone pressure.

REST. After the patient revives he must be kept quiet for at least 24 hours. The asphyxia has been a terrible strain on the heart and it must have as complete rest as possible.

DRUGS. There are no specific drugs in the treatment of acute asphyxia. During the resuscitation, caffein-sodiobenzoate intravenously may be useful. Adrenalin, however, should be used only as a last resort. Other drugs are not only useless, but certain ones, such as alpha-lobeline, can be definitely harmful. After the patient has become conscious, hot coffee or tea may be given.

SUMMARY

(1) Place in prone position.
(2) Patient on incline, head pointed downhill.
(3) Clear air-way by finger deep into throat.
(4) Prone pressure, slowly and rhythmically.
(5) Heat to combat shock.
(6) Complete rest after resuscitation.
(7) Pronounce dead only after repeated examinations.

Most important: Seconds count! Begin prone pressure immediately.

Trademark Registered **STORM** Trademark Registered

Binder and Abdominal Supporter



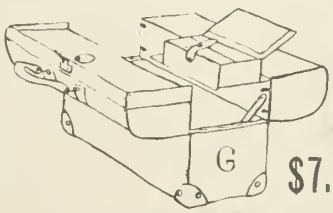
Gives perfect uplift. Is worn with comfort and satisfaction. Made of Cotton, Linen or Silk. Washable as underwear. Three distinct types, many variations of each.

The Picture Shows "Type N"

Storm belts adaptable to all conditions, Ptosis Hernia, Pregnancy, Obesity, Sacro-Iliac Relaxations, High and Low Operations, etc.

Ask for Literature

KATHERINE L. STORM, M. D.
Originator, Owner and Maker
1701 Diamond St. Philadelphia



Physicians' BAGS
$7.98 to $20
GAUSEPOHL TRUNKS
51 MONUMENT CIRCLE Indianapolis

Important to Your Babies!

ACCEPTED by AMERICAN MEDICAL ASSN. Committee on Foods



Larsen "Freshlike" Strained Vegetables are first quality garden fresh vegetables cooked, strained and sealed under vacuum to protect vitamins and mineral salts. For further protection we seal in special enamel lined cans.

All Varieties 10c Per Can

LARSEN'S *"Freshlike"* Strained Vegetables

THE LARSEN COMPANY, Green Bay, Wis.



• By tending to exert a prophylactic effect, Aminophyllin (Searle) may prove a valuable aid toward ameliorating the distress or actually staving off the storm of an anginal seizure.

AMINOPHYLLIN
(SEARLE)

Aminophyllin (Searle) is strictly an American product—made in America from American materials.

Supplied in 1½ gr. tablets for oral administration; in powder (½ oz. bottles) for retention enemas and prescription compounding; 2-cc ampuls for intramuscular use; 10-cc ampuls for intravenous injection.

YOUR SPECIFICATION OF "AMINOPHYLLIN (Searle)" insures you of the benefits of a dependable product which is passed by the Council on Pharmacy and Chemistry of the American Medical Association.

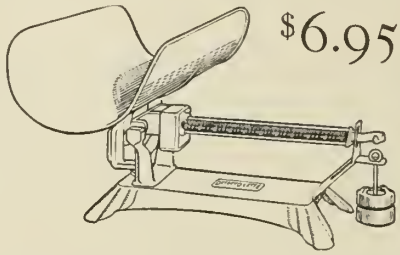
G. D. Searle & Co.

FINE PHARMACEUTICALS SINCE 1888

CHICAGO

LOS ANGELES KANSAS CITY SPOKANE

DETECTO-LETTE
Springless Baby Scale



$6.95

Registers every ½ ounce up to 25 lbs.

Guaranteed 5 years

AKRON SURGICAL HOUSE, INC.
221 North Pennsylvania St.
INDIANAPOLIS, INDIANA

Behind MERCURochrome
(dibrom-oxymercuri-fluorescein-sodium)

H V & D *is a background of*

Precise manufacturing methods insuring uniformity

Controlled laboratory investigation

Chemical and biological control of each lot produced

Extensive clinical application

Thirteen years' acceptance by the Council of Pharmacy and Chemistry of the American Medical Association

ACCEPTED AMERICAN MEDICAL ASSN Council on Pharmacy and Chemistry

A booklet summarizing the important reports on Mercurochrome and describing its various uses will be sent to physicians on request.

Hynson, Westcott & Dunning, Inc.
BALTIMORE, MARYLAND

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

OFFICE OF PUBLICATION: 1021 Hume Mansur Bldg., INDIANAPOLIS, INDIANA

VOLUME 28 AUGUST, 1935 NO. 8

ORIGINAL ARTICLES

APPENDICITIS*

P. G. SKILLERN, M. D.
SOUTH BEND

A brief review of the history of inflammation of the appendix is pertinent. The earliest definite anatomic record of disease in the appendix was reported by Heister in 1755, who, while dissecting a body at Altdorf in 1711, found a gangrenous appendix containing pus, with regional peritonitis. The first reported case of appendicitis observed during life is the classical one of Mestivier in 1759. A man of forty-five sought relief for a tumor in the right side of the umbilical region. Fluctuation could be detected, and about a pint of pus was evacuated by incision. The patient died, and necropsy revealed patches of gangrene on the cecum and a large, very rusty pin in the appendix. The incision and evacuation of old encysted collections of pus in the right iliac fossa, however, was practised as far back as the beginning of the Christian era.

With the advent of the nineteenth century, the appendix began to be more frequently mentioned. In 1812, Parkinson, of London, described the first case in which perforation of the appendix was recognized as the cause of death. To the Frenchman, Mélier, of Paris (1827), however, belongs the credit of first formulating correct conclusions as to the existence of inflammation of the appendix in a chronic form; of recognizing the causal relationship between this chronic affection and suppurative tumors in the right iliac fossa; and, lastly, of first suggesting the possibility of surgical interference in such conditions. In 1846, Volz, in a thesis, advocated the treatment of perforation of the appendix with opium. Krönlein, of Germany, in 1884, was the first to perform coeliotomy followed by resection of the appendix.

* A clinical lecture delivered to third year medical students at Northwestern University Medical School, April 22, 1935.

In 1886, Reginald Fitz, of Boston, in a classic paper, cleared up the entire subject of disease of the appendix and coined the word "appendicitis." After this date operations for removal of the appendix multiplied with great rapidity, the foremost early American operators being Thomas G. Morton, of Philadelphia; Henry B. Sands and McBurney, of New York; and, later, John B. Murphy, of Chicago, and John B. Deaver, of Philadelphia.

Although the belated recognition and ensuing successful treatment of appendicitis has saved countless lives, yet the fact that the annual loss of life in the United States from appendicitis is 20,000 is appalling. So, too, statistics show that the death rate has increased from 11.4 per 100,000 in 1910 to 18.1 in 1930, demonstrating that we still have much to learn about this disease.

Certain embryologic considerations of the appendix help us deal with the organ when diseased. At about the eighth month of fetal life the cecum with the appendix takes a position immediately beneath the liver, remaining there until about the fourth month after birth, when the elongating colon pushes it downward toward the right iliac fossa. But the cecum may be arrested at any part of its journey, and when at operation it is not found in the right iliac fossa, it may be looked for either in the right hypochondriac region or near the umbilicus (McKnight). Lennander even mentioned the case of a boy of sixteen years, in whom the cecum and appendix were found in the *left* hypochondriac region lying against the spleen. H. A. McKnight has recently reported an operative case of acute appendicitis in a patient with congenital non-descent of the colon, in which the cecum and appendix were found in the left hypochondriac region to the left of the spinal column, near the fundus of the stomach.

Various important anatomic data throw much light upon the causes, symptoms, results or complications, and treatment of appendiceal inflammations. The appendix is an apparently functionless organ, found only in man, in certain of the anthropoid apes, and in the wombat. Like other vestigial structures it appears to be of low resistant power. Its mesentery (the mesoappendix) is

scanty; the free border is shorter than the border attached to the appendix, thus throwing the appendix into irregular curves or coils, and interfering with its drainage. The appendix depends for its blood-supply upon one small artery, which readily becomes occluded by septic thrombi. The abundance of lymphoid tissue in the appendix, as in the tonsils, favors rapid swelling in infection and aids in obstructing drainage. Not infrequently one sees acute appendicitis develop in a child within a week after an attack of acute tonsillitis. The incidence of appendicitis among tonsil cases is 49 per 1,000. As with the rest of the alimentary tract, the musculature of the appendix undergoes a slow rhythmic peristaltic movement by which, if the lumen be still patent, the cecal contents are slowly introduced and extruded. These peristaltic movements are often visible to the operating surgeon in the non-diseased appendix. The stiffening of the appendix by inflammation destroys these peristaltic movements in acute disease, and twists, kinks or traction interfere with them in chronic appendicitis, thus favoring retention of mucus, desquamated epithelium, fecal contents (concretion, or fecalith), bacteria, and leading to ulceration, parietal infection, or perforation or gangrene, and peritonitis.

Anatomic points relating to the symptoms of appendicitis first concern pain, which is at first general and diffused because the superior mesenteric plexus of the sympathetic, which supplies the appendix, also largely supplies the intestines, and because irritative nerve-pain is apt to be referred to the peripheral extremities of nerves; next and within a very short time felt in the umbilical region, because as such pain increases in intensity it is often referred to the nearest nerve-center, and the great sympathetic ganglia of the abdomen are situated near that region.

Second, tenderness. After a few hours the pain is felt in the right iliac fossa, because it has then become a neuritis of sufficient grade to cause tenderness on pressure. The point of pain on pressure indicates, with moderate accuracy, the base, not the tip, of the appendix, and is rarely absent even in gangrenous cases, because that portion of the appendix is usually the last to be affected by interference with the blood-supply. This point, corresponding to the base of the appendix, is known as McBurney's point, and is at the crossing of the spino-navel line with the outer border of the rectus muscle. The chief tenderness may be lumbar if the appendix lies behind the cecum, or close to Poupart's ligament or to the median line, or best elicited by rectal touch if the appendix lies in the pelvis. Occasionally an inflamed appendix will lie in the sac of an inguinal hernia.

Third, rigidity. This involves the right rectus and later the other abdominal muscles over the right iliac fossa, is usually due to peritonitis, and arises from the fact that those muscles receive their nerve-supply partially from the six lower intercostals, while the superior mesenteric plexus gets its contribution from the spinal system through the splanchnics, derived from some of the same intercostals.

In "International Clinics," Vol. III, Series 29, the author, for purposes of orientation, described what he termed the *appendix chamber*, a little chamber bounded in front by the anterior abdominal wall; behind by the iliac fossa; externally by the lateral abdominal wall; internally by the terminal coil of ileum and meso-appendix; below by Poupart's ligament; and above and in front by the towering cecum, which is usually covered by the omentum. In this little chamber the appendix ordinarily houses itself, and when it becomes inflamed and perforates, the ensuing abscess may develop in front of the cecum, behind it, to its inner side, or below, in the pelvic cavity, with agglutinated intestinal coils bounding it superiorly, often resulting in *ileus duplex*, or inflammatory obstruction of the terminal ileum. Any of these abscesses may perforate into the cavity of the peritoneum, but spontaneous opening into the cecum, colon, rectum, small intestine, bladder, or on the surface of the body has frequently occurred. Thus, pus from appendix infection may be spat out (empyema), or passed from the bladder or rectum. The various symptoms which may result from the propinquity of the abscess to other structures should be worked out anatomically—e.g., (1) edema of the abdominal wall over the abscess; (2) flexion of the thigh, extension of which is painful from involvement of the iliopsoas muscle; or marked lumbar tenderness (perinephric); or immobility of the right lower thorax (subphrenic), or purulent expectoration (intrathoracic or empyema); or vesical or rectal irritation.

The pathology of appendicitis is advantageously approached by reducing it to its simplest terms. When I was a student at the University of Pennsylvania my preceptor, Dr. Simon Flexner, professor of pathology at that time and now director of the Rockefeller Institute, had me read Metchnikoff's work on "Phagocytosis and Immunity," which describes the mobilization of the body's defensive mechanism against bacterial invasion or the microscopic warfare between bacteria with their toxins and the phagocytes, which engulf the bacteria, and the antitropic serum. These processes may be studied grossly in a boil, or furuncle, in which bacteria invade and destroy a hair follicle which becomes encircled by a wall of phagocytes and antitropic serum. Within a few days the destroyed hair follicle is shed as the greenish-white core, followed by the thick pus of concentrated phagocytes, thinning to the serum which finally dries to form the scab. Essentially the same process takes place in acute appendicitis, with modifications due to the anatomic factors mentioned above. An important one of these factors is the endothelial-covered peri-

toneum, which reacts to irritants just as the eye reacts to a cinder in the conjunctival sac, the one forming peritoneal exudate and the other tears.

The acute inflammation may terminate in one of three ways:

(1) Subsiding or return to normal.

(2) Tissue destruction with local ulceration and perforation, or gangrene or suppuration. The latter may terminate with perforation or rupture and result in walled off abscess or general peritonitis.

(3) Healing with fibrosis (chronic appendicitis).

In all cases at the start the mucosa becomes swollen and congested and the varieties of acute appendicitis are largely determined by the extent of invasion of the remaining coats of the organ, especially the peritoneal. Thus, we may have:

(a) Catarrhal.
(b) Diffuse.
(c) Purulent.
(d) Gangrenous.
(e) Obstructive.
(f) Perforative.

By catarrhal appendicitis is meant an inflammatory process affecting only the mucosal lining (endo-appendicitis). This type may undergo complete repair, and in cases which presented clinical evidence of repeated attacks the appendix, when removed in the interval, may appear quite normal.

In diffuse appendicitis the inflammatory process very early extends beyond the mucosa, and there is a general involvement of all the coats. Now, instead of the normal, pale, flaccid organ of about the thickness of a goose quill, the appendix is often as thick as the index finger, the tip being frequently slightly clubbed and the whole tense, rigid and red.

Purulent appendicitis represents an advanced inflammatory reaction to the invading bacteria in that there has been time for pus to form or for the defensive mechanism to get well under way. One of the chief factors promoting suppuration is defective emptying of the appendix, due to obstruction of its canal from a pre-existing partial stenosis becoming complete by acute swelling of the tissues, or from an impacted fecalith, with consequent damming back of the inflammatory exudate and distention of the appendix itself into a large pus-sac (pyo-appendix) which, with the occurrence of gas formation, becomes a pyopneumo-appendix. It is just this kind of a diseased organ that the surgeon operating for appendicitis likes to encounter because it confirms the diagnosis, relieves the feeling that another lesion has been overlooked, and anticipates perforation.

Gangrenous appendicitis is due to local ischemia from circulatory obstruction, which may be caused by thrombo-angiitis, twists, angulations, and compressions by adhesions or by a hernial ring, while localized areas of gangrene may be produced by the pressure of concretions. It is not uncommon to find the appendix represented by a dark greenish-black lumbricoid mass, which has separated from its cecal attachment and lies free in the abscess cavity.

Obstructive appendicitis, or acute appendicular obstruction, arises when the proximal lumen is occluded by stenosis, acute swelling, or a foreign body, usually an inspissated fecalith. Wilkie maintains that approximately 90% of fatal cases of appendicitis are of the obstructive type due, no doubt, to the far greater frequency of gangrene, perforation and other complications in this type. That form of acute appendicitis which follows a blow in the right iliac fossa is usually of the obstructive type, the remote cause being chronic appendicitis associated with a foreign body, usually a fecalith. This is the pathology of the so-called "traumatic appendicitis." An illustrative case of obstructive or traumatic appendicitis occurred in my practice recently in the person of a schoolboy, aged twelve, who, shortly after being kicked in the abdomen, had to be excused from school, and while on the way home had colicky pain so severe that he was twice forced to stop and sit upon the running board of a parked car and vomited both times. When I saw him a few days later he had a large abscess, evacuation of which revealed a large pea-sized hard fecal concretion as the cause of the perforation.

PERFORATIVE APPENDICITIS

Perforation may take place in any variety of acute appendicitis and in any stage of the attack. It may follow bacterial ulceration, reaching the peritoneal surface, or necrosis from a concretion or other pointed and irregular foreign body such as a pin, tack, or fruit pip. A tensely distended empyema, or pyo-appendix, often terminates in rupture of the appendix walls, and it is particularly in such cases where a large amount of highly virulent material is emptied into the abdominal cavity that the most fatal forms of peritonitis result. I liken this empyema "blowout" to a Fourth of July squib, where we would take an unexploded firecracker, bend it in the middle until one wall breaks, apply a lighted punk to the hole, and watch the swish of outrushing sparks. We can also liken the cecum and appendix to a balloon and its valve.

A long experience with acute appendicitis teaches one that its effects may be widespread. It may be the primary focus of metastatic infection to the following organs or regions: (1) Liver, through the lymphatics, but more often through the radicles of the portal system. Thus, there may arise a subphrenic abscess, or even an empyema (lymphatic infection); a liver abscess from septic pylephlebitis (portal system); and cholecystitis, from infection of liver *via* portal system. (2) Stomach, through the lymphatics, causing gastric ulcer. (3) Duodenum, by the same route, causing duodenal ulcer. (4) Peritoneum, spreading by con-

tact and producing diffusing peritonitis. (5) Preperitoneal areolar tissue, resulting in retroperitoneal cellulitis. (6) Pelvis, infecting by contiguity the right fallopian tube and producing acute tubo-ovarian disease as an immediate effect and extrauterine pregnancy as a remote effect.

The mesoappendix in acute inflammation becomes greatly thickened and exceedingly friable so that the ligature, although placed with the utmost care, often tears directly through it. Septic thrombosis of its veins may extend upward through the superior mesenteric vein into the portal, producing pylephlebitis. If you men want a real job in hand you should undertake the treatment of one of these cases of septic pylephlebitis!

Chronic appendicitis presents as its most distinctive feature extreme rigidity of the organ from cicatricial tissue. Contrary to its usual conception chronic appendicitis may have an insidious onset and occur independently of any acute attack. It may even be the forerunner of acute appendicitis. It is my belief that chronic appendicitis may exist at birth, at least to the extent that the appendix is compressed by anomalous peritoneal bands.

Residual appendicitis is the term applied by Kelly to the various deformities of the appendix which may follow acute or chronic inflammation after the active disease has subsided. The results may be hypertrophy or atrophy of the appendix, stricture or obliteration of its lumen, cystic dilation (mucocele), diverticula or angulations or twists due to adhesions or cicatricial contractions in the appendix walls. These changes are the usual source of Ewald's *appendicitis larvata.*

OBLITERATIVE APPENDICITIS

In a few cases chronic appendicitis proceeds by slow stages to partial or complete obliteration of the lumen, which is Nature's method of spontaneous cure. Obliterative appendicitis, in my experience, is often the cause of pylorospasm with hyperchlorhydria and "appendiceal dyspepsia."

Chronic periappendicitis, in my experience, explains many instances we all as surgeons encounter, in which the report comes back from the pathologist that no lesion was found in the appendix. The trouble here is that the pathologist does not see the living pathology of the appendix *in situ,* where the organ is kinked, twisted or compressed by adhesions which are necessarily destroyed in the removal of the appendix, whose mucosa and muscularis may not show pathologic change.

The cardinal symptoms of acute appendicitis, namely, colicky pain *followed* by vomiting, tenderness most marked at McBurney's point, perhaps rigidity of the rectus, moderate fever and leukocytosis are too well known to merit discussion here. If vomiting precedes the pain the case is probably not one of appendicitis. An important step in eliciting tenderness and one that is frequently neglected is examination through the rectum. This is particularly valuable in children and in cases in which the appendix is deeply situated behind the cecum. Rigidity of the rectus is an inconstant sign and should be discounted when absent. In estimating the degree of infection clinically the pulse-rate is of more value than the temperature. Of these symptoms and signs the most constant and valuable is that of tenderness most marked over the base of the appendix, which corresponds to McBurney's point, or to the palpating finger in the rectum. The most fatal type of appendicitis, namely, the obstructive type, unfortunately usually gives rise to very few physical findings to explain the severe pain the patient complains of, and the surgeon may even be hesitant to operate early because of the lack of rigidity and of elevation of temperature and pulse. In fact, the obstructive cases resemble right ureteral obstruction more than the typical textbook picture of appendicitis so that one must be alert in detecting this type. Rigidity may be absent when the appendix is situated behind the peritoneum.

Experience shows that symptoms simulating acute or chronic disease of the appendix may be due to movable right kidney, renal or ureteral calculus, pyelitis, diverticulitis of bladder, cholecystitis, pancreatitis, simple or perforated gastric or duodenal ulcer, pedunculated omental tumor, mesenteric lymph-adenitis, right-sided tubo-ovarian disease, including ruptured ectopic, twisted ovarian cyst, pedunculated fibroid, bands or adhesions such as Lane's kink of the ileum and membranous pericolitis (Jackson's membrane), an abnormally movable cecum, ileocecal tuberculosis, ulcerating carcinoma of cecum, volvulus in ileocecal region, Meckel's diverticulum, and finally to one of a number of very uncommon conditions such as typhlitis, suppuration at the internal ring, etc. The left-sided appendix of *situs inversus viscerum,* when inflamed, may give rise to considerable confusion in diagnosis. The normally situated appendix may, of course, reach to the left of the mid-line. It may be said, incidentally, that congenital absence of the appendix is among the greatest rarities. Deceptive, too, may be the spread of peritonitis toward the appendix from acute disease in the subhepatic region above, or in the pelvis below. Abdominal angina, tabetic crises and, in children, developing pneumonia with abdominal rigidity must not be confused with appendicitis. Appendicitis may so simulate ulcer of the stomach and duodenum that Lord Moynihan of Leeds has coined the phrase "ulcer in the right iliac fossa."

As aids in the diagnosis, x-ray changes, though of slight clinical significance, can be utilized as confirmatory evidence. The x-ray, of course, is of considerable aid in eliminating other affections. Increase in the white cell count ranges from 10,000 to 15,000 in the majority of cases, and between 15,000 and 33,000 in the minority. In some severe cases, however, the count does not correspond with the severity of the inflammation. However, a fall-

ing white blood count and rising polymorphonuclear count to 72 per cent or above should be viewed with apprehension, especially when the latter extends above 80 per cent. The ordinary leukocyte count may be augmented by Schilling's differential band cell count, which recognizes the non-segmented (band) neutrophile that normally constitutes four to eight per cent of all leukocytes; the presence, also, of occasional metamyelocytes or myelocytes means an even greater danger than the rise of the band cells, the more immature the blood cells, the more severe the infection. Notwithstanding these guides the surgeon should never let these laboratory data supersede his own experience and judgment.

The prognosis is good up to the time of perforation, but bad after that, except in well walled-off abscesses.

In the treatment of acute appendicitis always bear in mind the slogans "purgation means perforation" and "procrastination means death." One reason for the higher mortality in acute appendicitis in children is that they have usually been the unwilling recipients of purgatives such as castor oil, for even if the stomach wisely rejects the first dose the mother generally wins in the end. It doesn't take much imagination to picture the rupture of a tensely distended appendix and the spreading of its highly toxic contents throughout the peritoneal cavity by the lashing hyperperistalsis of a bowel overstimulated by a cathartic. The slogan "procrastination means death" is the safest rule-o'thumb in cases of acute appendicitis when seen early, for this is the most insidious and at times baffling of acute conditions and, like a kaleidoscope, may change in the twinkling of an eye from an apparently subsiding condition to a case of diffusing peritonitis; in one hour it can change from an immediate operative case to one wherein delay is advisable. In a few situations only is the opportunity given of entirely removing the site of an acute inflammatory process to the great advantage of the individual, notably as in acute appendicitis. It is almost axiomatic now that if an appendix becomes the site of acute inflammation its removal, immediate or remote, is inevitable for future safety.

When I was an interne at the Lankenau Hospital in Philadelphia I often heard my chief, the late Dr. John B. Deaver, admonish us to "make haste slowly." This, paradoxically, has its application in the present-day management of a case of acute appendicitis. Instead of rushing the patient from the ambulance to the operating room, as of yore, we have found our mortality statistics lowered by a brief initial preoperative period of rest in bed, with opium and intravenous glucose in the pre-perforative stage and in those with a well localized abscess. Nor is an appendiceal abscess any reason for panic, for it indicates that the resistance is capable of arresting the spread of infection. Within a few hours the pulse will have slowed down and the general condition will have improved, and operation may be more safely undertaken.

In cases of localizing abscess with diffuse peritoneal irritation or diffusing peritonitis, however, this *laissez-faire* regime should be continued until the infection has become localized and the fever has subsided. For patients who have been vomiting, suction drainage of the stomach or duodenum is important, and for the dehydrated, sufficient quantities of normal saline with five per cent glucose should be given. Morphine is given every four hours until the respiratory rate is noticeably reduced. Mouth feeding is taboo.

In infants and young children in whom the walling-off process is hampered by a usually high position of the appendix and a short, underdeveloped omentum, it is best to operate immediately.

To sum up, deaths from appendicitis can be prevented by: (a) accurate diagnosis; (b) absolute avoidance of laxatives; (c) very prompt operation within the first 48 hours of the disease; (c) adequate operation properly timed for patients seen late with peritonitis; (d) proper preoperative treatment; (e) interval appendectomies with histories of one or more definite attacks; (f) appendectomies, where feasible, during other intra-abdominal operations.

As to the operation itself, but little need be said. You are all familiar with the McBurney incision, which should be placed over the site of the appendix as revealed by the region of maximal tenderness or, if a palpable mass is present, directly over the center of the mass. This incision allows the operation to be performed with minimal disturbance to the abdomen in general and the small intestine in particular, and is followed by a lower mortality than the rectus incision, which is a fruitful means of spreading the infection throughout the peritoneal cavity, as well as of a subsequent postoperative hernia.

If, when the peritoneal cavity is opened, free fluid escapes, it is removed by the suction pump. The appendix is sought for and freed by the exploring finger. At times, especially when retrocecal, it is most easily removed by the robin method; that is, after ligating and severing the base it is taken out backward, like a robin takes a worm from the lawn.

Just as all roads lead to Rome, so any one of the three taeniae coli leads downward to the base of the appendix, which lies three-fourths inch below and mesial to the ileocecal junction, sometimes curled up in the ileocecal fossa. The exploring finger should start at the common iliac artery and work upward and inward to that point. Congenital absence of the appendix is among the greatest rarities. Dr. John B. Deaver, who operated upon about 1,500 cases of appendicitis a year for more than 30 years, never failed to find the appendix.

Hemostasis is effected by carefully ligating the mesoappendix through which course the appendi-

ceal vessels. A bleeder is sometimes encountered in the angle between the base of the appendix and the cecum. A second ligature may be applied to the mesoappendix for safety's sake.

The purse-string suture technic for burying the stump of the appendix in the cecal wall I abandoned over fifteen years ago. I do not deem it necessary, and cases have been reported in which it resulted in localized slough of the cecal wall, with perforative peritonitis. Bunts, of Cleveland, reported a case in which the healed inverted stump was later found popped out to form a miniature tent-like projection on the surface of the cecum, an event that has probably occurred an unknown number of times. Ligate the appendix near its base.

An appendix clamp is applied to the organ one centimeter distal to the ligature, the appendix is divided close to the clamp, and the stump is touched with a drop of pure phenol. A second ligature is applied to the stump for safety's sake, the cecum is allowed to retract, the stump of the mesoappendix or a nearby fat tab or fold of peritoneum is loosely placed over the stump, and the omentum drawn down and arranged over all. The sponge count is taken and the peritoneum is closed by everting its edges. A couple of sutures are placed through the internal oblique and transversalis muscles, but not tied so tightly as to cause necrosis of the muscles. The upper edge of the transversalis sometimes retracts upward and must be sought for and fed to the needle. A few interrupted sutures close the external oblique aponeurosis and the skin is closed by clips or suture. The wound is painted with iodine and requires no dressing. The clips or suture are removed within four or five days.

An unperforated appendix—even a gangrenous one—is not usually an indication for drainage. But when there is pus outside (i.e., outside of the appendix), drainage should always be employed. A few lengths of tubular rubber dam judiciously placed suffice in the average case and emerge through the outer angle of the wound, usually opposite, or posterior to, the anterior superior spine of the ilium. You should always aim to approach and drain an appendiceal abscess as far out in the flank as possible, the better to avoid the small bowel area, so vulnerable to infection. Remove or leave the appendix, according to its location, free in the abscess cavity or forming part of its inner wall, which may be "only just holding." If you leave it you may be surprised some morning to find it in the dressing as a greenish-black, smelly, worm-like slough that you might mistake for fecal matter from a fecal fistula. Concretions, too, might be found in the healing sinus or on the dressing. Otherwise the appendix should be removed several weeks or months after the wound has healed.

In the postoperative care of a suppurative case of appendicitis intravenous fluids should be given freely and copiously. Opium and pitressin may be given if indicated for pain or gas in bowel. Freer drainage of the wound is attained by the addition of continuous suction. The drains are not disturbed for five days.

Residual and secondary abscesses as from below upward, pelvic, intermesenteric, subhepatic, subphrenic or intrathoracic (empyema) must be diagnosed and operated upon promptly. Continued septic fever and rapid pulse must arouse your suspicions, which will be confirmed by finding a mass by palpation or x-ray examination. I have known an intermesenteric abscess to cause intestinal obstruction, as will *ileus duplex*. It has been well said that he who undertakes an operation for appendicitis must be qualified to deal with any abdominal surgical condition.

In operating for chronic appendicitis, when you are sure of the diagnosis, the McBurney incision suffices. Thus, when assisting my former chief, Dr. John B. Deaver, I have timed him on many occasions when he removed the appendix in three and one-half minutes from the start of the incision to the last skin stitch. This incision may be extended mesially by transverse division of the rectus sheath and retraction of the rectus muscle with due care for the deep epigastric vessels, or it may be carried out into the flank as far as is necessary. In fact, a retrocecal appendix or abscess is best approached through the iliocostal space which, incidentally, provides the most dependent drainage.

If the preoperative diagnosis of appendicitis is in doubt, it is best to use the longitudinal "compromise" incision over the edge of the rectus muscle, either going directly through it or retracting it mesially. The center of the incision is opposite the navel. This incision may then be extended upward or downward as needed.

ABSTRACT

CLINICAL USE OF ANESTHETIC AGENTS AND METHODS: CHAIRMAN'S ADDRESS

JOHN S. LUNDY, Rochester, Minn. (*Journal A.M.A.*, June 29, 1935), states that the factor that should receive first consideration in the clinical use of an anesthetic agent is safety both at the time of administration and subsequently. He discusses each agent separately and stresses the general principles that seem to him controversial only in isolated instances. He concludes that there are three types of persons who administer anesthetics: (1) the experienced, (2) the occasional user, and (3) the inexperienced. This paper is especially intended for the one who would be considered inexperienced, even though he might have informed himself by reading or by other means than the actual use of anesthetics. The inexperienced person who has attended good demonstrations of the use of a given agent is an exception. There is no better way to teach the art of anesthesia than by practical demonstrations, and he advises those interested in anesthesia, but who are inexperienced, to take advantage of present-day opportunities to receive such teaching. The anesthetist, whatever he sees demonstrated, whatever he knows, and whether he is experienced or inexperienced, should never forget that of two anesthetic agents of similar toxicity the more volatile one is the safer.

A SAFE TECHNIQUE FOR CIRCUMCISION*

H. D. COGSWELL, M. D.
INDIANAPOLIS

There are but few procedures in the domain of minor surgery that are done more frequently than circumcisions. In spite of the fact that a circumcision is one of the less technical surgical procedures, it "has been accorded far less respect than the usual difficulties of the procedure involved."[1]

There have been several cases in the hospitals in Indianapolis in late years where the glans has been partially amputated with a goodly loss of blood and eventually a constricted meatus as a result. Yearly there are cases admitted to this hospital that must be recircumcised for a secondary phimosis due to an insufficient amount of prepuce being removed at the time of the primary circumcision. Oftentimes slow healing and distortion of the penis is seen due to the removal of too much prepuce below the corona.

Many techniques and instruments have been described in the medical and surgical journals in the last ten years for performing a circumcision. Moskovich's circumcision forceps[2], Stone's guillotine method[3], and Harris' preputome[4], etc., are described, and the inventors claim good results. Many of these instruments are costly and, in some cases, too elaborate for the average physician to use.

Since the majority of circumcisions are done by general practitioners, a technique is here presented which does not entail any instruments other than those present in the average physician's instrument cabinet.

PROCEDURE

The usual preparation is done by scrubbing the penis, scrotum, and over the pubis with green soap and water followed by a 1:5,000 solution of bichloride of mercury. The prepuce is retracted, when possible, and the adhesions are freed by a probe or grooved director. This is most important. When it is impossible to retract the foreskin a dorsal slit is made to about one-fourth inch distal to the coronal sulcus, and the adhesions are freed. I believe the dorsal slit should be accomplished before loosening the adhesions to prevent the probe from entering the meatus.

TECHNIQUE

It is advisable to circumcise the prepuce about three-sixteenths of an inch proximal to the coronary sulcus. Usually a wrinkle in the skin at this point will serve as a preliminary landmark to show the approximate line for cutting. Hemostats are placed on the posterior and anterior muco-

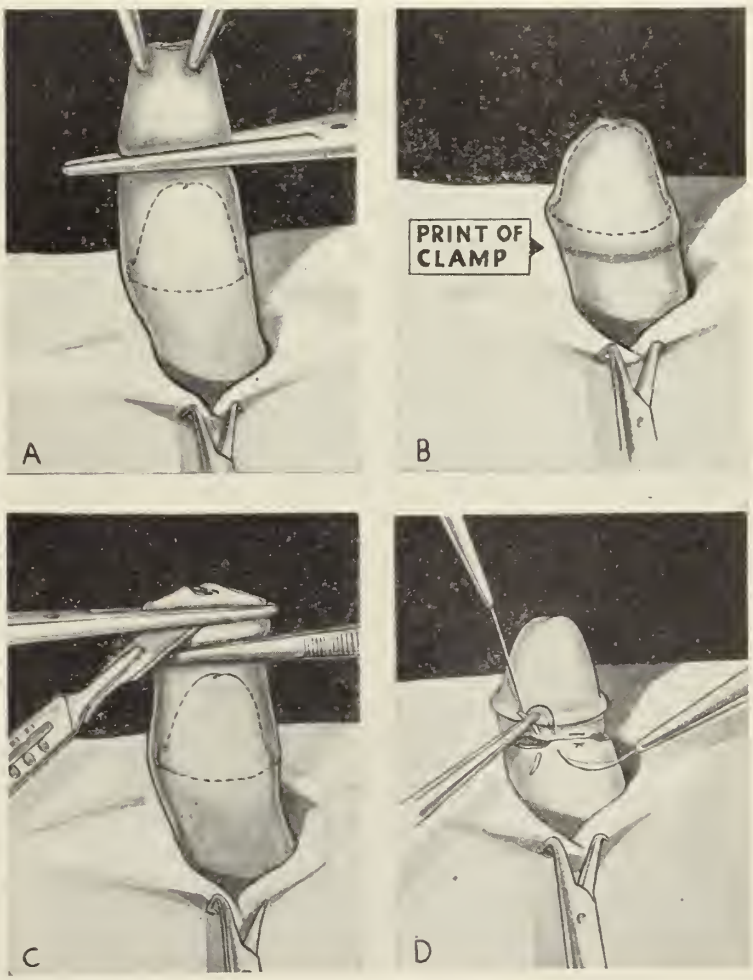


Figure A—Shows the foreskin on tension with the clamp being compressed just enough to leave a print on the prepuce.

Figure B—Shows the print of the clamp on the prepuce and its relation to the coronary sulcus.

Figure C—A clamp has been placed over the print on the skin, a thumb forceps has been placed in an opposite direction under the clamp, excluding the glans from the field of cutting, and the knife is shown cutting the redundant prepuce free.

Figure D—Shows the type of suture used for approximating the skin and mucous membrane.

* From the Division of General Surgery, Indiana University Hospitals.

[1] F. C. Christopher: Minor Surgery. Textbook, p. 319. W. B. Saunders Co. of Philadelphia. 1930.

[2] M. H. Moskovich: Circumcision Forceps. *J. A. M. A.* 74:1167, April 24, 1920.

[3] C. T. Stone: Phimosis and the Guillotine, a New Instrument for Circumcision. *Med. Record* 98:1061, December 25, 1920.

[4] H. H. Harris: Circumcision, New Instrument for Simplification. *M. J. and Rec.* 135:195-196, February 17, 1932.

cutaneous junction and the redundant prepuce is placed on tension. Holding the two hemostats in one hand, the other hand is free to place a clamp across the foreskin so that the proximal edge of the clamp corresponds to the line of incision which will remove the redundant prepuce. The size of the clamp used may vary according to the size of the prepuce to be removed. In small individuals a Halstead clamp serves very well, and in larger males a Kocher clamp is preferable. The clamp is not clamped, but gently compressed just enough to leave a depression in the skin (Figure A). The foreskin is then dropped back to its normal position (Figure B) and it is then determined by the impression left by the clamp if this line will be a satisfactory margin after the redundant prepuce has been removed. If the margin is not satisfactory the clamp can again be compressed, using the first impression on the foreskin as a landmark to find the line for cutting. When a satisfactory margin has been determined, the two hemostats on the anterior and posterior margins are removed, the foreskin is again placed on tension, and the clamp clamped along this margin. A thumb forceps is then placed in an opposite direction proximal to the clamp to push the glans out of the field (Figure C). To reassure the operator that the glans is out of danger he may transilluminate the area between the instruments or he may palpate the glans and move it downward below the thumb forceps. A scalpel is passed next to the proximal edge of the clamp (Figure C), cutting the redundant skin free, making sure that there is sufficient pressure on the thumb forceps to approximate the opposite mucous membrane edges and to exclude the glans. Hemostasis is accomplished by tying the large bleeders with No. 00 plain catgut and using pressure with gauze sponges for the oozing surfaces.

The mucous membrane which is left over the glans is then cut with sharp scissors, leaving a margin of about three-sixteenths of an inch surrounding the sulcus of the corona.

The skin and mucous membrane are then approximated with No. 00 plain catgut. The closer and more thoroughly approximated the skin and mucous membrane are sutured, the better the healing. The suture which has been most satisfactory is shown in Figure D. This suture is very efficient in controlling bleeding at the frenulum by placing the suture through the skin on one side of the raphe, through the mucous membrane, passing over the frenulum to the opposite side of the raphe, through the mucous membrane, through the skin, and then tied.

A sterile gauze dressing saturated with normal saline solution is placed over the sutured area. This promotes better and more rapid healing. The wet dressing is used continuously for two to three days. In children this dressing is changed after each defecation and urination, and in adults the dressing should be changed once a day. This type of dressing absorbs any serous and sanguinous drainage from the wound, prevents crusting, causes no pain when removed, and is far more satisfactory than the commonly used vaseline dressing. At the end of two to three days the wet dressing is discontinued and two per cent ammoniated mercury ointment is applied over the line of approximation until healing is complete.

The success of the circumcision depends as much on the postoperative treatment as on the surgical procedure itself. Therefore, if the patient is not in a hospital during his convalescence he should be advised not to apply any favorite "salves" or home remedies to hasten his recovery and should be instructed in the use of the wet dressings.

COMMENT

The technique described here is simple and requires no special instruments for performing a circumcision. It has the advantage over the common dorsal slit method in that the landmarks are definite and the amount of prepuce to be removed can be determined before any cutting is done. The bleeding is practically nil by this method up until the time the prepuce is completely removed. The glans penis is protected from partial or total amputation and no particular experience or skill is required to obtain excellent results. The wet dressing promotes rapid healing and obliterates the discomfort usually present at the time that the dressing is changed.

I wish to express my gratitude to Dr. W. D. Gatch and Dr. H. O. Mertz for their suggestions and to thank Mr. J. Glore for the accompanying illustrations.

CANCER OF THE RECTUM*

HOMER H. WHEELER, M. D.
INDIANAPOLIS

Cancer now ranks second as the cause of death in Indiana, as well as in the United States. Cardiovascular diseases are first. The Indiana death rate from cancer has increased from 39 per 100,000 in 1900 to 110.8 per 100,000 in 1932, or an increase in reported cancer deaths of about three hundred per cent.

Cancer is any kind of malignant growth; it is a general term for designating numerous types of the disease, just as acute infectious diseases comprise a rather wide group of maladies.

The 1930 figures of the American Society for the Control of Cancer disclose the fact that 17,151 or 15.2 per cent of all reported cancer deaths were caused by cancer involving the peritoneum, intestines and rectum, and I believe that it is very conservative to say that five per cent of all cancer deaths are due to cancer of the rectum. It also is my belief that cancer of the rectum

* Presented before the Daviess-Martin County Medical Society at Washington, May 28, 1935.

is one of the most frequently overlooked forms, for various reasons, chief among which are the similarity of sypmtoms to those of other diseases in that region, and the timidity of the patient and the general practitioner in making a thorough investigation of any abnormal condition of the rectum.

The number of patients who are seeking consultation is increasing, but in a large percentage of those seeking advice, the disease is so far advanced when they are first seen that nothing radical can be done, and all chance of obtaining a cure of the condition has already been lost.[1]

Men are affected with rectal carcinoma more often than women. Most of the patients with rectal cancer are between forty and seventy years of age.

PATHOLOGY

The usual type of growth found in the rectum is adenocarcinoma, or a carcinoma in which the cells are arranged in the form of glands.[2] "All carcinomas of the rectum develop from the crypts or glands of Lieberkuhn; those originating in the anal canal are true squamous-cell carcinomas."

Now that patients with cancers of the rectum and colon come for consultation more often in the early stage of the disease, we are more often able to grade the malignancy of the local growth, and to know which ones will die of metastasis. More benign lesions are observed, which fact makes it reasonable to suppose that they are the local lesions which precede the cancer.

According to Miles[3], adenocarcinoma is the only type of cancer that appears in the rectum. He says that although there is only one type of carcinoma of the rectum, four clinical varities of carcinoma can be recognized, varying in characteristics and in degree of malignancy. They are papilliferous, common adenoid, colloid or mucoid, and melanotic; they are mentioned in the order of degree of malignancy. Involvement of the adjacent structures by direct extension does not occur for at least a year after the first appearance of objective symptoms. Miles also indicates that there is no doubt that cancer cells occasionally become disseminated by means of the venous system; in fact, it may be spread in three ways: direct extension through continuity of tissue, by way of the venous system, and by means of the lymphatic system.[4]

Spread by direct extension takes place on the mucous surface of the bowel progressively from its entire margin, through the thickness of the bowel wall. The marginal increase is generally greater and more rapid in the transverse direction than in the longitudinal axis of the bowel. In an average case, it takes probably six months for the growth to include a quarter of the ampulla's circumference. A period of perhaps eighteen months is required before three-fourths of the ampulla's circumference is encompassed; neighboring structures (the sacrum, uterus or vagina, prostate, or bladder) are not invaded for a period of approximately one year.

Other modes of extension take place simultaneously and with greater rapidity, with distant dissemination, even when the primary growth still is in an early phase of development.

Dissemination by means of the venous system doubtless occurs, as microscopic specimens afford evidence. Cancer cells, detached from the main body, are carried by the venous system to a great distance from the primary growth. As the rectal veins belong to the portal system, cancer cells penetrating them are carried straight to the liver, and often this metastasis in the liver is the only evidence of dissemination. Fortunately, this mode of spread is somewhat rare. Definite liver metastasis is usually a late manifestation.

The most important mode of dissemination of cancer cells in the perirectal tissues and to distant parts is through the lymphatic channels: the intramural (two networks in the wall of the rectum), the intermediary (a subserous network in the portion of the rectum covered by peritoneum), and the extramural—the most important of the three—collecting stems from the lymph sinus, and entering into relation with the anorectal glands of Gerota, which are scattered over the surface of the rectum among the branches of the superior hemorrhoidal vessels.

"The papilliferous growth extends rapidly along the mucous membrane and soon involves the whole circumference of the bowel. It grows very rapidly and soon fills up the entire lumen of the bowel and produces obstruction. It is slow to infiltrate the muscles and is, therefore, one of the least malignant forms of carcinoma of the rectum.

"The adenoid type is sessile, early involves the deeper structures, and penetrates the muscles, enters the fat outside the rectum within the fascia propria, and attaches to the pelvic wall and the organs and tissues surrounding the rectum. This is the common or usual type of carcinoma of the rectum.

"The colloid or mucoid carcinoma is simply an advanced stage of the adenoid while the melanotic carcinoma partakes of the nature of melanotic tumors wherever found and is important in connection with treatment in that it is always fatal, and therefore not amenable to any treatment other than palliative."

The great majority of cancers of the rectum are of the adenocarcinomatous type. They usually are

[1] Lockhart-Mummery, J. P., London: Treatment of Cancer of the Rectum. *Med. Press and Circular*, London, February 27, 1935.

[2] Rankin, F. W., Bargen, J. A., and Buie, Louis A.: The Colon, Rectum, and Anus. W. B. Saunders Company, 1932.

[3] Miles, W. Ernest: Pathology of the Spread of Cancer of the Rectum and Its Bearing Upon the Surgery of the Cancerous Rectum. *S. G. and O.*, 1931.

[4] Report of Cancer Comm. of Calif. Med. Asso.: Cancer of Rectum, Anus, and Rectosigmoid. *Calif. and West. Med.*, Vol. 40, June, 1934.

seen as sessile tumors involving the mucosa and submucosa. In the majority of cases, the growth is flattened, the transverse diameter being greater than the longitudinal. The tumor increases in size in all directions and though at first freely movable, it soon infiltrates and becomes adherent to the muscular coat. Deep infiltration probably takes place within six months after the inception of the neoplasm, and as the growth increases, surface disintegration occurs and a definite ulcer with well known malignant characters is formed. The retro-rectal lymph glands are usually invaded even at this early stage; thus extramural dissemination of cancer cells takes place while the growth still is in a clinically early stage of development. The ulcer deepens, more of the circumference of the bowel is involved, and later stenosis of the lumen is produced. The adenoid cancer must always be considered highly malignant. It will recur after a restricted operation.

Of greater importance than the classification of carcinoma of the rectum is the microscopic grading of the neoplasm, by the Broders' system. Broders classifies or grades them in four groups; the more nearly the cell approaches the embryonic or undifferentiated type, the more malignant is the tumor, and vice versa, and the more nearly normal the tumor cell, the lower the grade of malignancy.

ETIOLOGY

Etiology of cancer of the rectum, and perhaps of all cancer, is a little questionable. Chronic irritation is presumably a factor; the rectum and anus are peculiarly subject to traumatic and chemical irritation. However, changes in the polyps in the bowel may be traced through different stages to malignant metamorphosis. There is no doubt that these polyps occasionally undergo changes which result in adenocarcinoma of the rectum or colon. Thus, polyps of any size in the rectum and sigmoid, found through proctoscopic examination, should be removed, as is the case with a precancerous lesion in any other part of the body. While it has been said that cancer of the rectum does not develop in such lesions as anal fissure, proctitis, hemorrhoids and strictures, yet the incidence of such occurrences is great enough to make the consideration important in considering the origin of rectal cancer. Tissues altered by hemorrhoids, fistulas, etc., may not give rise to cancer, and the presence of hemorrhoids may be only a coincidence, yet some of our nationally prominent cancer specialists and surgeons now are emphasizing the significance of such lesions as precursors of cancer.

It is interesting, at this point, to note that the incidence of cancer in Chinese men is ten times more frequent than in Chinese women, and it has been given as a possible reason that the Chinese like their food extremely hot; inasmuch as the men eat first, and the women wait upon them, the women eat their food when it has cooled. This refers to cancer of the mouth and upper digestive tract, including the stomach.

All erosions, ulcerations, and indurations of a chronic character should be considered precancerous and treated as such.

Constipation is not a significant etiologic factor, for while constipation is much more common among women than among men, yet the incidence of cancer of the rectum is estimated to be from thirty-three per cent to fifty per cent more frequent in men than in women. The anus is the portion of the rectum most liable to irritation by the passage of feces, yet it is the most infrequent site of rectal cancer. Carcinoma of the rectum usually is found at the rectosigmoid juncture, in the ampulla, or in the anal canal.

A history of bowel habits for the year or two prior to consultation may be helpful to the physician.

SYMPTOMS

Unfortunately, cancer of the rectum does not cause pain in the early stages. Therefore, we must emphasize the importance of observation of the disease in its incipiency, and the importance of a most careful and thorough study of what may seem to be casual symptoms, such as any unusual appearance (for instance, leukoplakia) in the skin or mucous membrane in any portion of the body. These signs ordinarily appear before the later symptoms of loss of weight, bleeding, ulceration, or marked abnormal discharges.

In adenocarcinoma of the rectum, the mucosa and submucosa are first involved, without attachment of the tumor to the muscularis and without a break in the continuity of the mucosa. In this early stage, the surface is flattened; soon the surface becomes ulcerated, the edges are indurated and nodular, and later a typical crater is formed. On reaching the intermuscular lymphatic network, the disease tends to progress around the bowel in the direction of these vessels, which accounts for the encircling tendency of rectal carcinoma.

Growths at the rectosigmoid juncture usually originate close to the mesenteric border; they tend to encircle the bowel completely and give evidences of obstruction early, usually within a twelve month period.

Some of the symptoms which may be present in rectal cancer are bloody or slimy stools; bleeding; increasing constipation; and morning diarrhea (early stage).

Bloodgood[5] says that the warning most readily recognized is blood in the stools. Then there may be attacks of colicky pain; there may or may not be diarrhea or blood in the stools without indiscretion in diet. There may be a sudden or gradual constipation requiring cathartics, and unusual, vague sensations within the abdomen. Discomfort

[5] Bloodgood, Joseph C.: Cancer of the Colon and Rectum. *Annals of Surgery*, April, 1932.

from tight clothing or a belt when bending over may be noticed.

In a long-continued proctocolitis, especially of the chronic type, single or multiple adenomata often occur. The gut continues to fill with these polypoid tumors, eventually producing a greater or lesser degree of obstruction, hemorrhage, diarrhea, and other symptoms. These tumors are the irritative result of glandular hyperplasia. Recto-colonic adenomatosis and polyposes always have been considered benign, yet one of a hundred of such tumors may be malignant, and thus all such tumors should be classified as potentially cancerous.

Early cancer, we repeat, causes no pain; its symptoms are not disturbing. The patient with rectal cancer may mention the presence of a little mucous diarrhea following a period of constipation; he may have a muddy or toxic complexion. An examination is indicated in every person who presents such common symptoms as increasing constipation, bleeding, menstrual, ureteral, prostatic and vesical disturbances. Cancer of the rectum may advance to the inoperable stage without presenting any objective symptoms. Thus the imperativeness of its recognition through thorough examination for any minor complaint is readily recognized.

In the group of 200 cases reported by Bargen and Leddy,[6] bleeding was the earliest noticeable symptom, pain occurred next, then constipation, and lastly diarrhea. A combination of these symptoms was reported by many, and while the symptoms were noticed to be progressive, yet they were not serious enough to cause the patient to go to his physician. In these cases, self-medication was common, and self-treatment included diet regulation, remedies for constipation, and "pile cures."

EXAMINATION

Upon first presenting himself, the patient is painstakingly examined. He is placed in the Sims' position; the finger is inserted as high as possible, and the patient is asked to bear down. The pelvic contents thus come within touch. The same procedure may be repeated with the patient in a moderately stooping position. The finger then sweeps the circumference of the gut, and the pelvic cavity content, including the sigmoid flexure, is palpated.[7]

Examination is made to determine the situation of the growth; which wall it is on and whether high up or low down; the degree of fixation, and to which part it is fixed (fixation posteriorly is not so serious as fixation in front, nor is the latter so serious in women as in men); the presence of glands in the mesorectum; evidence of secondary deposits; and (through the sigmoidoscopic examination) to ascertain if any other growth or lesion exists and to enable a piece of the edge of the growth to be removed for biopsy. Bargen and Leddy say that carcinoma of the rectum can nearly always be diagnosed with the index finger.

DIAGNOSIS

There is no difference between the warnings of a local lesion not cancerous, a local lesion which ultimately will be cancerous (e.g., polypoid growth), and a local lesion which already is cancerous. This makes differential diagnosis difficult in spite of modern diagnostic methods.

Biopsy is the most important of all diagnostic aids. It is estimated that in seventy-five per cent of all rectal cancer lesions, with the use of the proctoscope, biopsy specimens can be taken. Biopsy provides an exact diagnosis, and by means of it, the surgeon knows the form of therapy to be employed. It is true that biopsy always provides the possibility of dissemination, but it should be done as the lesser of two evils.

There are five methods of obtaining biopsy specimens: aspiration, punch, complete removal of tumor, removal of small portion of tumor edge, and bisection of the tumor *in situ*.

Malignant growths are apt to be solid or hard. Characteristic types of rectal cancer are: elevated ulcer with necrotic crater and normal periphery; a firm, granular, bleeding mass growing somewhat into the lumen of the bowel and having an indurated base; and the scirrhus variety which tends to produce an annular stricture.[8]

In spite of the fact that a good many authors express confidence in digital examination, it is my belief that it should not be relied upon to any great extent in making a definite diagnosis. The proctoscope should be in the hands of every general physician, and should be *used* in every routine examination. All specimens should be examined microscopically to confirm the clinical diagnosis.

The physician should remember that *any change in bowel habit* should cause him to suspect cancer until it has been ruled out.

TREATMENT

Rectal cancer cases are divided into two groups for purposes of treatment—operable and inoperable.

For the operable cases, surgery and irradiation are the two recognized and generally accepted forms of treatment, and surgery in most cases is the most effective means for eradicating cancer.

Lockhart-Mummery[1] divides operable cases into three classes:

(a) epithelioma cases, treated by means of radium, with or without preliminary colostomy;

(b) cases where the growth is high up at the recto-sigmoid junction, treated by abdomino-perineal or perineo-abdominal excision;

[6] Bargen, J. A., and Leddy, Eugene T.: Carcinoma of the Rectum. *J. A. M. A.* 104:14, April 6, 1935, p. 1201.

[7] Jelks. *South. Med. Jour.*, April, 1925.

[8] Cutting, R. A.: Anal. Carcinoma. *Am. Jour. Surg.*, new series, X-3, p. 549.

(c) cancer of the rectum proper, treated by perineal excision.

The Mayo Clinic[9] employs, as preoperative treatment, a residue-free, high carbohydrate diet; in addition, an intraperitoneal vaccine, made up of colon bacilli and streptococci, is administered about seventy-two hours preoperatively. This is done as a preventive of peritonitis. Rankin, Bargen and Buie[10] in 1932 reported a series of 222 patients in whom the vaccine was given, with a mortality rate of 4.9 per cent; in a series of 58 patients who did not receive vaccine, the mortality rate was 22.4 per cent. They point out the fact that while lowering the mortality 17.5 per cent in this series is perhaps not attributable entirely to the vaccine, it certainly recommends it as a likely factor.

Adair[11] says that cancer surgery is a twin to military surgery in that the fundamental principle is to excise all wounds widely. "The surgeon at times must ruthlessly sacrifice important structures with the idea of later repairing the damage. Wide block dissections must be resorted to—an entire organ, together with its lymph drainage basins, must be removed." To prevent dissemination, a liberal amount of intestine must be removed with the growth.

Caution is essential in the handling of cancerous tissue. It should be remembered that the instruments used in the care of a cancerous case should be treated as if they were contaminated with bacteria. Cancerous tissue should be given like consideration; the utmost gentleness should be employed at all times.

Bargen and Leddy[6] point out that the exact status of a given lesion can only be determined by operation, and that radical operation in the hands of an expert and experienced operator entails a mortality of less than five per cent.

As in other forms of cancer, radium may be effectual in early cases, but is very unsatisfactory in late cases except as a palliative. Radium is only palliative above the anal region; it is not curative except in the anal region where accuracy in placing the needles or seeds is possible. It may be employed either in the form of needles or seeds, implanted under and around the tumor. The growth is curetted away as completely as possible, leaving a flat wound without raised edges, and this facilitates the correct placing of the radium.

Care must be taken to avoid radium burns; however, the treatment should not be administered by any other than an expert. Recurrence may be treated again with radium, or removed by diathermy or excision. Coffey[12] has called attention to the fact that in a few cases where radium had been used some months prior to operation, he has later opened the abdomen with the intention of doing a radical operation, and in every case of that kind, a metastatic nodule was felt in the liver. He also points out that the usual method of spread of cancer is through the lymphatics, and after studying the anatomy of the lymphatic system, the necessity of a radical operation is apparent.

Cancer of the rectosigmoid requires expert and extensive attention at the hands of the specialist. Exacting preliminary preparation and prolonged postoperative care are essential. Treatment is by combined abdomino-perineal excision.

Cancer of the ampulla of the rectum is treated by perineal excision, and is also an extensive process requiring the services of a specialist particularly interested in this disease. Some operators prefer to do a colostomy and resection.

Cancer of the anus, usually epithelioma, is in most instances highly malignant. This is because of the abundant lymphatic supply. This type of cancer is most amenable to radium treatment, because accuracy in placing the radium is possible. The curability of radium treatment is not comparable with surgery even in the anal region. The smallest percentage of growths appear in the anal canal and external anal orifice.

The most important part in treatment of cancer of the rectum (and in all other cancer) is *early diagnosis*. The earlier the patient comes to operation, the better is his chance for cure. Because most of these patients with cancer of the rectum are not seen until the disease is in an advanced stage, the belief has become common that good results cannot be expected, and that palliation is the most that can be hoped for. Vigilance on the part of the general practitioner will enable him to discover the disease in its incipiency when surgery may be curative.

Surgical intervention of cases of carcinoma of the rectum, anus, and rectosigmoid is most important, and should be the first consideration. An attempt should be made to grade the malignancy in each case, and then decide on a plan of attack. Malignancies graded I and II are operable and when operated early and efficiently, a five year cure may reasonably be expected; if graded III or IV, they are suitable for palliative treatment through surgery or radium or a combination of the two.

Bowing, Fricke and Harper[13] believe that carcinoma of the rectum is a surgical problem and that radium and roentgen rays are valuable surgical adjuncts.

[9] Collected Papers of Mayo Clinic and Mayo Foundation. XXV, p. 166. W. B. Saunders Co., 1933.

[10] Rankin, Fred; Bargen, J. A.; and Buie, L. A: The Colon, Rectum and Anus. W. B. Saunders Co., 1932.

[11] Adair, Frank E.: Attitude of Modern Surgeon Toward Cancer Problem. *J. of Med.*, Cincinnati, Vol. XVI, No. 1, March, 1935, p. 8.

[12] Coffey, Robert C.: Cancer of the Rectum and Rectosigmoid. *Amer. Jour. of Surgery*, October, 1931, pp. 161-214.

[13] Bowing, Harry H.; Fricke, Robert E.; and Harper, Fred R.: Treatment of Carcinoma of the Rectum by Radium. *Amer. J. of Roentgenol. and Radium Therapy*, Vol. XXV, No. 5, May, 1931.

When metastasis to distant parts has occurred, none but palliative treatment is indicated. It may be interesting to note that the average duration of life in untreated cases with cancer of the rectum is twenty-one months.

PROGNOSIS

Early diagnosis is essential, and in regard to prognosis, its importance cannot be made too emphatic. Delay and mismanagement must be thoroughly condemned, for through them, many patients are left without hope of cure and are condemned to palliative and hopeless treatment. Until proved otherwise, a lesion should be considered cancerous whenever there is any doubt about it.

Any new cure for cancer invariably catches the public eye. It may vary from the most grotesque proposal, or one with a pseudo-scientific basis, to remedies that have been more or less carefully studied and which have an appearance of actual worth and scientific accuracy. There are satisfactory cures for cancer being employed every day, and they are based on well known biologic facts. The two remedies—surgical excision and irrradiation (or a combination of the two)—are quite satisfactory *if applied early.*

Dr. J. Shelton Horsley[14] says that we should cease to worry about finding a new cure for cancer, for the study of the biology of cancer appears to show that constitutional remedies or serums probably never will be effective. The important thing, he says, is *not* to search for new cures, but to search for new methods of early diagnosis so that the present well known treatments may be applied while there is time for cure.

All authors are agreed upon the fact that the ultimate cure depends chiefly upon the stage of the local malignant disease at the time the operation is performed. A poor prognosis is frequently due to the waste of valuable time through self-medication, delay by the physician in making appropriate examination, and lack of knowledge on the part of the laity as to the safety and satisfactory end-results of rectal surgery.

CONCLUSION

It is the general practitioner who sees first, but does not always recognize, early cancer of the rectum. If the general practitioner will insist upon subjecting his patients to a rectal examination routinely, much will be accomplished in finding precancerous lesions at a time when they may be properly diagnosed and effectively treated. Early diagnosis is essential.

311 Hume Mansur Building.

[14] Horsley, J. Shelton: Cancer Cures. *Bull. Am. Soc. Control of Cancer*, Vol. 16, No. 12, December, 1934, p. 12.

SURGERY OF THE THYROID GLAND*

CLEON A. NAFE, M. D.
INDIANAPOLIS

Thyroid disease as a surgical problem can best be discussed by presenting a classification of goiter as seen by the surgeon. This may be given briefly as follows:

1. Non-toxic nodular goiter.
2. Non-toxic diffuse goiter.
3. Toxic diffuse goiter.
4. Toxic nodular goiter.
5. Malignancy of the thyroid.
6. Thyroiditis.
7. Aberrant thyroid gland.

The first four types include the types of goiter ordinarily seen, and is the nomenclature recommended by the American Association for the Study of Goiter. The newer literature reveals much greater agreement as to classification and terminology. Following the observations of Reinhoff, and others, the nodular goiters in both groups are being looked upon more and more as the end stages of the changes causing the diffuse enlargements. As a result, the use of the term "adenomatous goiter," is being more and more replaced by the term "nodular goiter." There are undoubtedly cases of true fetal adenoma of the thyroid, but there seems to be serious doubt whether the most of these nodules are adenomata or not. The present tendency is to believe they are not, although as yet this conception is not uniformly accepted. However, this classification is simple, workable, and understandable, and is the one now most commonly used.

The last three types comprise a small per cent of the thyroid surgical problems and I will speak briefly of these conditions before discussing more fully the problem of handling the usual thyroid patient.

MALIGNANCY

Malignancy is present in approximately 1.5 per cent of all thyroid enlargements when seen by the surgeon, according to statistics in large clinics. The malignancy is carcinoma, more rarely sarcoma. Of the carcinomata, adenocarcinoma is more frequent, and papillary carcinoma next in frequency. Nodular goiters become malignant much more frequently than diffuse goiters.

The diagnosis of malignancy can rarely be made before operation and the malignancy successfully removed without recurrence. If the treatment by operation is to be successful, the neoplasm must be confined within the capsule of the gland and be removed completely. Only those are cured that are capable of diagnosis by microscopic examination. Since other thyroid changes produce microscopic appearances almost indistinguishable from malignancy, there is some difference of opinion

* Presented before the Marion County Medical Society, Indianapolis, March 26, 1935.

among pathologists concerning these diagnoses. At The Mayo Clinic sixty-five per cent of the malignancies were diagnosed by microscopic section following removal. In an elderly patient in whom a solitary nodule enlarges rapidly accompanied by a choking or constricting sensation, malignancy should be suspected. In recurrences, malignancy should be thought of also. When infiltration with hoarseness and pressure symptoms are present, the diagnosis is easy, but treatment can only be palliative. These tumors usually respond well to radiation and this furnishes the best form of palliative treatment. Occasionally surgery is necessary to lessen pressure on the trachea. The patients with sarcoma die quickly while the carcinomatous patients may be relieved for some time by radiation or radiation combined with surgery.

THYROIDITIS

Thyroiditis is a relatively common condition occurring about as frequently as malignancy. The inflammation may be acute or chronic. The acute type is usually associated with or follows some acute inflammation elsewhere, usually of the mouth or upper respiratory tract. It is characterized by the usual signs of acute inflammation elsewhere, pain, induration, swelling, fever, etc. The treatment consists of icebags to the neck and symptomatic. If suppuration occurs, the abscess must be drained.

Chronic thyroiditis presents itself in several forms and may be associated with hyperthyroidism. It may follow acute thyroiditis or it may be tuberculous. In recent years a chronic inflammation characterized by the formation of an iron hard tumor has been described under several names, the most commonly used being Reidel's struma or Reidel's chronic thyroiditis, the etiology of which is unknown. The subjective symptoms are those of pressure and dyspnoea, which rapidly become worse and may require tracheotomy. The gland is firm and the symptoms simulate malignancy. Often the differential diagnosis can only be made by biopsy. The symptoms are produced by the firm adhesions of the gland to the trachea and the resulting constriction of fibrosis. This must be relieved by surgery. Hashimoto's disease, a form of chronic thyroiditis, is thought by Edwin to be the early stage of this same disease. Theoretically, subtotal thyroidectomy should be performed with caution on cases of chronic thyroiditis because of the fear that myxoedema may result. However, a rather large number of cases of so-called Reidel's chronic thyroiditis, and also Hashimoto's disease, have been subjected to almost complete thyroidectomy with complete recovery, according to the literature. Also, Rankin reports 21 cases of chronic tuberculous thyroiditis from The Mayo Clinic on which subtotal thyroidectomy was performed with uncomplicated recovery.

ABERRANT THYROID

Aberrant thyroid tissue may occur at the base of the tongue or lateral to the thyroid in the anterior triangle of the neck. These misplaced glands occur rarely, and are the result of faulty embryological development. They may partake of all the changes of thyroid tissue elsewhere and are particularly prone to malignant changes, especially those in the neck. Lingual tumors tend to bleed. In the neck the tumor is usually unilateral and may be single or multiple. When tumors are present in these regions, aberrant thyroid tissue should be thought of. If present, they should be completely removed surgically, provided the surgeon has assured himself that the thyroid gland is present in the normal location. After removal x-ray treatment should be given because of the frequency of malignancy in the thyroid tissue at this site.

Substernal or intrathoracic goiters are rarely true developments of aberrant thyroid tissue but are usually accompanied by a cervical goiter from which a greater or lesser portion extends into the thoracic cavity. They should be suspected in a patient when the lower pole of the gland cannot be felt. The symptoms are a harassing non-productive cough, stridor, choking spells, hoarseness, or chord palsy, difficulty in swallowing, dilated veins of the neck and chest, a deviated larynx and displacement of the trachea. When suspected, a diagnosis can be made readily by x-ray. Often the main portion of the goiter is intrathoracic. The treatment is surgical.

NODULAR GOITER

Nodular or diffuse goiter, with or without toxicity, is the usual type seen by the surgeon. It is questionable whether there is such a thing as a simple or non-toxic goiter. It is more probable that the symptoms are mild and we do not recognize the damage it is doing. I shall not discuss this phase except to say that in these mild, questionable cases of hyperthyroidism with fatigue and atypical symptoms, the thyroid gland should be examined carefully. The character of the gland can be ascertained by feeling the isthmus. Normally this should be a smooth area that seems to sort of flow away as you feel it. If, however, it is thick, firm and nodular or granular, the gland is abnormal. This can be felt best standing behind the patient with her sitting up and stroking upward on the isthmus. With the neck muscles relaxed an attempt should next be made to grasp the lateral lobes between the fingers and particularly note if the lower poles are palpable. By careful examination of the gland considerable information can be obtained, and may be the deciding factor in determining that the patient should be operated upon, when the symptoms are mild or atypical. A so-called non-toxic diffuse or nodular goiter should always be viewed with suspicion and the patient's interests would be served best if

they were all removed before the well known symptoms of hyperthyroidism have fully developed.

When definite signs of thyroid toxicity are present, surgical treatment following careful medical preparation of the patient is the most satisfactory method of combating the disease.

PREOPERATIVE CARE

The preparation of the patient for operation and the selection of the most suitable time for operation is always an individual, clinical problem and necessitates the closest cooperation between the surgeon and internist with each sharing equally the responsibility of the final decision as to when the patient is a safe surgical risk.

Of greatest importance in prepartion of the patient is Lugol's solution, 10 drops 3 times daily for a period of approximately 10 days. The dosage may be increased to twice this amount if this dosage is not sufficient to produce results and particularly if the patient has had iodine previously. With this the patient should have rest and relaxation, using sedatives if necessary, with plenty of fluids and food. Under this management the patient must be carefully watched and may be allowed to be out of bed a portion of the time if there is no cardiac decompensation. The decision as to whether the patient needs digitalis during this period should rest with a good cardiologist. It should be used only when there is heart disease for which it is indicated, such as decompensation or irregularity. Tachycardia itself is not an indication for the use of digitalis.

When the following requirements have been met in the preoperative management, the patient should be the ideal surgical risk:

1. Lugol's solution, 10 drops 3 times daily for 10 days.
2. Patient afebrile for at least 7 days.
3. No evidence of upper respiratory infection or badly infected teeth.
4. Loss of stimulation, or lessening of excitability and loss of jumpiness.
5. Compensated heart.
6. Falling pulse rate to ninety or below.
7. Evidence of gain in weight and strength.
8. Patient sleeping well.
9. Good appetite.
10. Lowering of the basal metabolic rate.
11. Tolerates being up and about for a few hours daily for several days before operation without obvious ill effects.

The following are unfavorable factors which increase the surgical risk and when present should cause considerable deliberation as to whether the patient is yet operable.

1. Long duration of the disease.
2. A severe degree of intoxication.
3. Recent thyroid crisis.
4. Occurrence of exophthalmic goiter in youth or elderly people.
5. A very large thyroid gland.
6. Substernal or intrathoracic goiter.
7. Extreme prostration and continuing weight loss.
8. Patients with a badly diseased heart or other coexisting disease.
9. An increasing basal metabolic rate or one that remains high.

By careful medical preoperative management over a period of 7 to 10 days or longer when indicated, toxic thyroid patients may be prepared so that a subtotal bilateral thyroidectomy can safely be done in one stage in a large percentage of cases.

Occasionally patients who have had iodine for a period of time become "iodine-fast" and even a considerable amount of Lugol's will not create a satisfactory improvement so that thyroidectomy can safely be undertaken. Many writers have called attention to this, showing that Lugol's solution produces the most satisfactory artificial remission during the period in which it is first used. For this reason they point out the desirability of reserving Lugol's solution when possible for this period of preoperative preparation.

There are still some minor differences of opinion among surgeons concerning the use of single or multiple stage operations. Most surgeons resort to multiple stage operations but rarely; Jackson uses it in "iodine-fast" goiters. In the Lahey Clinic multiple operations are used in 30 per cent of the cases. Lahey believes that particularly in the "apathetic type" of hyperthyroidism multiple stage operations are indicated. Richter advocates the one-stage attack as a routine measure and boasts a mortality of .89 per cent.

Very little has been added to the technique of thyroidectomy in recent years. It should be done as quickly as possible with minimum blood loss and with as little trauma to the adjacent structures of the neck as possible. A few refinements have been added since the earlier days of thyroid surgery. The incision is not so long and the strap muscles now are seldom severed. Division of the isthmus as a preliminary to bilateral resection facilitates delivery of the gland, especially when it extends behind the trachea or behind the clavicle. The gland can then in reality be pulled out rather than rolled out, dividing the upper pole first if the goiter is intrathoracic and the lower pole first if the gland extends upward about the trachea.

The choice of anesthesia is an individual problem for the surgeon and patient. Local infiltration anesthesia following a strong narcotic preanesthetic, using light gas anesthesia when the gland

is being delivered, if the patient is uncomfortable, has many advantages, especially in the cardiac patient. Many times no gas is needed at all and the heart is spared the strain of a general anesthetic. Furthermore, the patient may talk after the first lobe is removed and the surgeon will know whether the recurrent laryngeal nerve has been injured or not. Even as the clamps and sutures are being placed, the change in the voice or cough may warn the surgeon that the nerve is caught and they may be removed. If one nerve is injured the surgeon must then use every precaution to avoid injury to the other one. Unilateral abductor paralysis is unfortunate, but the patient will usually recover the natural use of the voice in several weeks. However, bilateral abductor paralysis is a tragedy. Having the patient talk, or the use of the laryngoscope to inspect the vocal cords, after the first lobe has been removed, are the only ways of being sure that the recurrent laryngeal nerve is not severed.

POSTOPERATIVE CARE

The essential consideration in the postoperative care is to keep the patient quiet with sufficient narcotics and replace the fluid loss with large amounts of fluids artificially. It is well to remember that a thyroid patient loses more fluids during operation and during the postoperative period than the average surgical patient. The fluid intake must be approximately 3,000 cc. if the water balance is to be maintained. Most patients are also given 4 to 8 cc. of Lugol's rectally during the first twenty-four hours of convalescence.

The remaining problem is to meet any complications that may arise. Some of these are:

1. Postoperative hyperthyroid crisis is the most feared complication and occurs in some degree following removal of all toxic goiters. After operation very little can be done to prevent it. The essential problem is to have the patient so well prepared and in a sufficient stage of remission that a severe crisis will not ensue. When it does, the patient must be given an abundance of Lugol's solution, plenty of morphine, ice packs to reduce the temperature, plenty of fluids intravenously, and general supportive treatment.

2. Postoperative hemorrhage may occur because of a ligature slipping. By having the patient cough before the wound is closed, certain latent bleeding will often be brought to light and lessen the incidence of postoperative hemorrhage. When bleeding does occur the patient suffers not so much from loss of blood as he does due to pressure and suffocation. This must be recognized early, the wound opened up under general anesthesia and the bleeding point carefully caught and ligated. Care should be taken not to blindly grab in the neck and injure other vital structures.

3. Stridor may occur as a result of injury to the trachea or recurrent laryngeal nerves. Dinsmore thinks it practically always due to injury to the nerves either by stretching when the gland is removed or by direct trauma. He thinks trachea collapses more or less a myth. When stridor persists and is not relieved by loosening the drainage tube, and there is no pressure due to local hemorrhage, a tracheotomy must be done promptly. The tracheotomy tube can usually be removed in a day or so.

4. Tachycardia and auricular fibrillation are the most common cardiac complications and should be treated as indicated.

5. Tracheitis occurs more frequently, Crile states, when the trachea is exposed, and he prefers that it not be bared. When it is exposed it must not be traumatized. The tracheitis is usually controlled with codeine as needed and usually disappears in five or six days.

6. Infection of the thyroid wound is a dangerous complication. A virulent infection may result in sepsis, extension of the infection into the mediastinum, troublesome secondary hemorrhage, myxoedema due to destruction of remaining thyroid tissue or other serious sequelae. Fortunately, after careful technique, infection of any severity seldom occurs. When it develops the wound should be opened widely and other treatment given to combat the systemic effect of the infection.

7. Tetany is an uncommon sequela that occurs following trauma to, or removal of, too much parathyroid tissue. The use of parathyroid extract relieves this condition, which, fortunately, usually disappears after a short time.

8. Nausea and vomiting are distressing but are largely eliminated by careful preoperative preparation and the use of local anesthesia or a skillfully administered general anesthetic.

9. Myxoedema is likewise an uncommon complication and usually only temporary. According to most observers it more often occurs when infection of the wound results. The administration of thyroid extract as indicated will correct the temporary thyroid deficiency. Rarely its use must be prolonged for a considerable period of time.

10. Pneumonia and emboli occur infrequently and unavoidably in a small percentage of cases, just as they follow other surgical procedures. They account for a small portion of the unavoidable fatalities.

The question then arises—what are the end results of surgery? When surgery is properly executed in well prepared patients, the mortality is approximately one per cent and well over ninety per cent of the patients are relieved of their thyrotoxicosis, according to statistics of large series of cases. Complications as mentioned can be largely avoided. If they occur and are recognized early they usually can be successully combated. Approximately two per cent of the patients

have recurrences of their symptoms and may require removal of additional thyroid tissue with ultimate good results in most of the cases.

Lugol's solution intermittently every few months postoperatively is of value in preventing the recurrence of hyperthyroidism, according to the belief of most men carefully studying the problem.

By studying the combined experiences of many physicians and surgeons dealing with this problem, one must conclude that thyroid surgery offers very satisfactory end results, prompt relief from disability, and an operative scar that is less unsightly than the goiter. Medical treatment of hyperthyroidism largely consists of diagnosis, careful preoperative preparation and good postoperative care, in association with the surgeon. All of which is of at least equal importance to the operation itself. Every surgeon doing much of this work recognizes that a competent internist is indispensable in the proper handling of these cases. Medical and x-ray treatment are otherwise usually reserved for those mild hyperthyroid cases in which the diagnosis is in doubt, cases of recurrence and in those few cases that are distinctly inoperable because of the prohibitive operative mortality, occasioned by delay until the case is hopeless.

There is undoubtedly much improvement of the handling of these patients in the last few years because of an enlightened public and a better understanding of the problem by all physicians. As a result the patients are being submitted for surgery at an early and more favorable period. I have particularly noticed this at the City Hospital. There is, however, still room for improvement and if I may leave one plea, it is that patients with goiter be urged to submit to surgery as early as possible in the disease, so that the desperate cases with badly diseased thyroid hearts and other undesirable complications will not confront the surgeon so often, and give him so many difficulties in operation and cause all concerned to have so many restless moments during the early days of the patient's convalescence.

821 Hume Mansur Bldg.

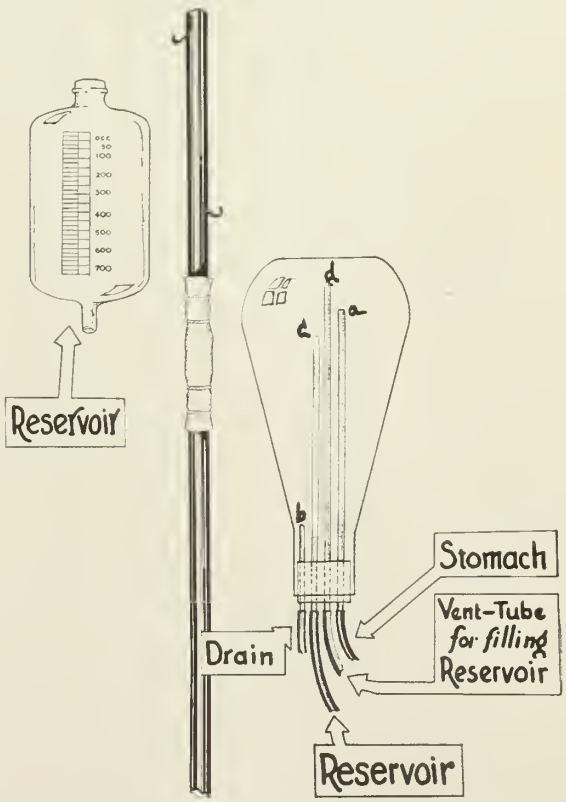
ANNUAL CONVENTION AT GARY, OCTOBER 8, 9 and 10. READ PAGE 401 AND MAKE RESERVATIONS NOW . . . . .

MODIFIED TYPE OF SIPHON-DRAINAGE APPARATUS OF THE MARIOTTE PRINCIPLE*

H. M. BANKS, M. D.,
MURRAY N. HADLEY, M. D.,
INDIANAPOLIS

Since the publication of an article[1] relating to the constant suction drainage of inlying nasal tubes, and dealing with decompression or drainage of the upper gastro-intestinal tract, there has been an ever increasing demand in this locality for the use of the siphon drainage method as illustrated or first exemplified by the French physicist, Mariotte. A demand for this equipment was made upon the department of laboratories of this institution.

An article published by Dr. John R. Payne and Dr. Owen H. Wagensteen[1] was consulted for the type of equipment which might be used. The general principles of their modified apparatus were elaborated in a very satisfactory illustration. During the process of operation of this apparatus it appeared to the observer that several fundamental principles of physics had been minimized, which might be incorporated in the original equipment



* From the Mary Hanson Carey Foundation for Laboratory and Research Work, Methodist Episcopal Hospital, Indianapolis.

[1] Payne, J. R., and Wagensteen, O. H. *Surg. Gyn. and Obs.* Vol. LVII, No. 5, pp. 601-611.

used by Mariotte. The author does not pretend to contribute any information in regard to the indications for the use of this equipment, or to its indicated value in the different clinical manifestations, nor is there any effort made on the part of the author to apply the apparatus clinically. The main principle of physics incorporated in the apparatus seemed to be completely ignored and as one studied the process of construction, it was suggested that it might be improved.

The following alteration was suggested: instead of having two tubes enter the bottle which was used as a vacuum suction, as a source of energy, four tubes could be introduced; thus the equipment would be made much simpler in regard to continuous operation.

As originally presented by Drs. Payne and Wagensteen, the siphonage bottle, when completely exhausted of the water which was used as a siphoning force, required complete dismantling of the equipment in order to produce further suction power. This manipulation seemed to be awkward and cumbersome, particularly when inexperienced individuals were handling the equipment. An outlet tube from the bottle to be used as a drain, for material siphoned off from a cavity, was essentially and fundamentally necessary; also the intake tube from the hollow viscus or from the patient to be drained was essential. A third tube introduced into the siphon flask might be used to carry water from a reservoir into this siphon bottle, in order to reproduce a filled vacuum-suction-reservoir in the siphon flask. In the introduction of this tube, it was found that the water would fill the bottle to a certain level and then the atmospheric pressure of the gas or air contained within the bottle became compressed to such a degree that no more water would enter. Consequently a fourth tube was introduced in order to allow the compressed air or the displaced air to be removed and thus completely fill the suction flask to any level desired. The following illustrations serve to designate the advantage of such a set-up of equipment; the suction level of the water in the suction flask can be maintained at a constant level without disturbing the patient.

Explanation of arrangement of tubes in siphon flask:

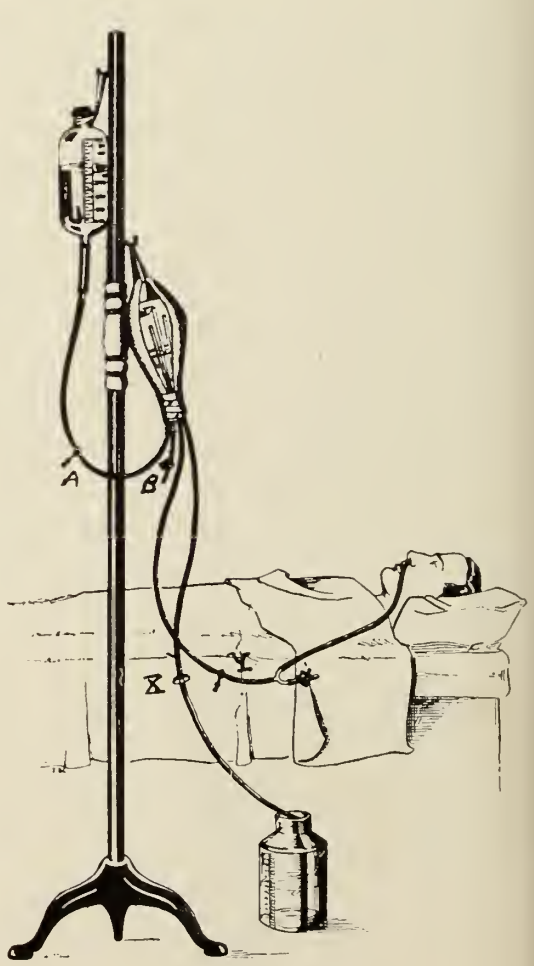
(a) Tube entering siphon flask from patient must be brought to a high level. This operates best at about ½ cm. to 1 cm. level longer than the other two tubes.

(b) Tube draining the siphon vacuum bottle to drainage receptacle must necessarily take the lowest point available. This is shown to operate best at 1 cm. to 2 cm. above the inner surface of the rubber stopper.

(c) The tube filling the siphon-vacuum bottle must be in length 1 cm. longer than the tube from the hollow viscus to be decompressed or drained.

(d) The tube which allows the escape of the displaced air or gas when filling the suction vacuum bottle from the water reservoir necessitates a length at least equal to (c), the tube which conducts the water from the reservoir into the vacuum-suction flask, but for optimum results should be the longest tube of all the series.

Total quantities of fluid used in the process of aspiration of any cavities may be accurately computed, both in the beginning and at the end of the procedure, together with the calculation of the amount of water added from the reservoir to the siphon bottle at various intervals. The principle therein involved is carried on as originally presented by the eminent French physicist at the same time the new adaptations in these two additional tubes are made, so that almost continual drainage can be kept up without disturbing the equipment once it is placed in position. The receptacle in which the drained fluid is obtained may be adapted to the uses of the operator for whatever one desires, whether measuring gases or fluids. The Y-shaped tube leading to the stomach, introduced into the system of the tube leading from the patient is still maintained as a means of irri-



gation. In the line of tubing from the patient may be introduced a reservoir in which the fluid or gas aspirated from the stomach may be led through a large receptacle, the intake of this receptacle being near the top of the stopper, and the outlet tube being about one-third of the way from the top of the bottle. In this way, any solid particles which are aspirated from a cavity might be allowed to gravitate to the bottom of the larger receptacle, and only fluid aspirated from this reservoir keeping the tube from the patient relatively free of obstructing material which might be of a solid nature or heavy sediment type of material.

With the equipment in position, it can be readily seen that the two petcocks, placed low down on the tubing, operate the drainage of the patient, while the two petcocks close to the stopper of the siphon flask operate the filling of the siphon bottle from the reservoir tank. To fill the siphon-vacuum-bottle the two upper petcocks are opened (A and B) to reservoir and vent tube, and the two lower petcocks (X and Y) to patient and to drain tube are closed. To continue siphonage the two upper petcocks (A and B) to reservoir and to air vent tube are closed and the two lower petcocks (X and Y) to patient and to drain receptacle are opened.

CONCLUSION

Modification of the apparatus suggested for the drainage of the gastro-intestinal tract, through nasal cavity suction, is suggested. This modification eliminates the necessity of a large suction reservoir, introduces and simplifies a continuous operation of the equipment without disturbance of the same during the process of continuous drainage.

This modification is suggested as an aid to those who might be constructing such equipment in a hospital laboratory service. No indication as to the use or application is incorporated in this report. The mechanical features alone and the principles of physics are pointed out.

DO YOU KNOW WHAT PROCEDURE TO FOLLOW WHEN YOU WANT COMPENSATION FOR SERVICES RENDERED THE INDIGENT?

READ MR. MARSHALL'S ARTICLE IN THIS ISSUE ON PAGE 394 . . . . . THE DETAILS ARE THERE

CATGUT ALLERGY

(Case Report)

H. D. TRIPP, M. D.
KEWANNA

Considerable work has been done experimentally to show the effect of various proteins upon the body. Almost every conceivable form of protein has been used in making tests on patients to determine sensitivity. Very little seems to have been written on the effect of catgut (sheep's intestine) upon the human body when used as suture material.

Every surgeon is familiar with the local reaction in wounds due to the presence of catgut. Sometimes it is necessary to remove greater or lesser amounts of the catgut before certain so-called stitch abscesses will heal. From this observation one can logically deduct that the burying of large amounts of catgut would be very likely to cause not only a local reaction but also a general reaction which might manifest itself in the form of urticaria, intestinal upset, or any other form of allergy, such as asthmatic attacks.

Since catgut consists of the submucosa of the sheep's small intestine, it necessarily is permeated by numerous bacteria. These cannot be completely removed and, although they are lysed, their proteins may still be present; therefore, multiple possibilities of producing reaction exist.

From the commercially prepared catgut a histamine-like substance has been isolated (Gurskin). Kolmer has shown that sheep serum is especially prone to cause allergic reactions in humans. Dr. Gerald H. Pratt and Dr. Andrew B. Small, working in Temple University, carried out a number of experiments on more than 120 patients, noting the reaction of the tissues to various suture materials including chromic and plain catgut. They buried short sections of sterile catgut in the skin; within twenty-four hours a flare and wheal appeared, characterized by zones of redness and slight swelling, which gradually increased until by the end of a week sufficient necrosis had occurred about the catgut to canalize the part, the lining of this canal being formed by granulated and necrotic tissue. The reaction is invariable but varies in degree in different individuals. From the catgut buried in wounds, tissue reaction occurs with leukocytosis, infiltration, weakening and local necrosis about the sutures. The reaction with liquefaction and removal of catgut precedes that of tissue union and as a result is delayed or impaired.[1]

[1] Babcock, W. Wayne. Catgut Allergy. *Am. Jour. Surg.* 18: 67, 1935.

In view of the facts available concerning various allergic manifestations whether due to catgut or horse dander, we should be cognizant of the possibilities of general reactions due to the use of buried catgut. The following case is reported as one of asthma due to catgut allergy.

CASE REPORT

The patient, a white female, age thirty-eight, housewife by occupation, had an abdominal operation five years previously. She subsequently developed a large incisional hernia. Strangulated loops of bowel would apparently produce partial obstruction from time to time, which were usually easy to reduce. The last attack of strangulation occurred October 27, 1932, producing colicky pain with vomiting and a mass in the left lower quadrant which was very tender and non-reducible. A diagnosis of strangulated hernia with obstruction was made and the patient removed to the hospital where she was immediately operated upon and the hernia repaired. The Mayo technique was used whereby the peritoneal flaps were imbricated, thus requiring the use of a large amount of number two chromic catgut.

There had been no history of allergic phenomena of any sort in this patient. The heart was normal in every respect, blood pressure was 110 systolic, 70 diastolic, and there was no evidence which would point toward a cardiac asthma. There were no foods to which she was sensitive. However, on the third post-operative day, the patient was seized by an attack of dyspnea, wheezing and cough, which was relieved by the administration of adrenalin but which recurred several times daily for a period of forty days after her operation.

Since no other cause could be found for her asthma and because there had been no previous or subsequent attack during the past two years, it was concluded that this was a case of catgut allergy. Forty-day chromic catgut was used in the repair of the hernia which gave a clue as to the length of time that the patient could expect to be bothered with the asthma. She was told that she would probably have trouble as long as there was any absorption of the gut and, incidentally, on or about the fortieth post-operative day, the patient was relieved of her attacks and has had no recurrence during the past two years.

CONCLUSIONS

1. Human beings show a local reaction to catgut.

2. A case of general allergic reaction to catgut is presented.

3. Silk, silver or stainless steel sutures are recommended where large amounts of suture material are to be buried.

ABSTRACTS

CATARACTS FOLLOWING THE USE OF DINITROPHENOL: PRELIMINARY REPORT OF THREE CASES

WARREN D. HORNER, RICHARD BARR JONES and W. W. BOARDMAN, San Francisco (*Journal A. M. A.* July 13, 1935), observed three cases of cataract occurring in patients who have been receiving dinitrophenol as a weight reducer. The age of the patients and the absence of other external or physical factors suggest dinitrophenol as the cause. All three patients have shown posterior subcapsular opacities resembling brass filings, together with faint powdery, anterior subcapsular changes. Two of the three have shown a peculiar dried appearance of the anterior capsule. In these two the lens changes have been markedly rapid in their development. In only one other condition, namely, frank traumatic cataract, have the authors seen lens fibers change so swiftly. In only one out of these four eyes has vision remained stationary for as much as three weeks. The others have progressed to blindness. The third patient has not been under observation long enough to determine progress. Since her opacities are the faintest that have been observed, the outlook may be better. The effect of dinitrophenol on the lens may be toxic, metabolic or dietary. It is known for a certainty that dinitrophenol does increase metabolism to a high degree and that it is possible to maintain this high rate during the administration of the drug. It is conceivable that the lens changes result from this excessive burning up of body tissues. Dehydration may be a factor, although this was carefully guarded against in the dinitrophenol administration. The hyperopia found at first examinations, particularly when previous refractions had been myopic, suggests a thinning of the lens with decreased refractive power. If this is a drying out process, the roughened, dry-looking anterior capsule might follow. However, forced fluids in one case did not cause any appreciable difference either in the appearance of the capsule or in the disappearance of hyperopia as compared with another case, in which less water was given. Another possible explanation might lie in some food deficiency on account of the restricted diet these patients received. Particular care was given, however, to guard against this in the selection of their diets. In six cases examined, in which dinitrophenol was taken for a considerable time, three showed lens changes of identical types. Under these circumstances, further use of dinitrophenol should be discontinued, pending further study of its secondary systemic effects.

SILENT MASTOIDITIS

GEORGE D. WOLF, New York (*Journal A. M. A.*, June 29, 1935), defines silent mastoiditis as an insidious progressive destruction of the mastoid process with or without otorrhea. The disease is afebrile and painless in its course. The tympanic membrane is usually involved, the hearing may be slightly or considerably impaired, and a history of some infection of the middle ear is frequently obtained. The condition is important because it is relatively common, frequently produces serious auditory damage and not uncommonly causes death through intracranial or systemic complications. Mastoidectomy is the rational, conservative and effective treatment. This operation in competent hands is always safe and is practically without mortality. It should, therefore, be preferred to chronic invalidism and possible dangerous complications. Headaches during the course of ear infection should be regarded as an early warning against procrastination of adequate surgical therapy. Cases are presented that illustrate the clinical features of silent mastoiditis, the diagnostic problems it may present, and the therapeutic procedures required to obtain satisfactory results.

THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION
DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

Office of Publication: 1021 Hume Mansur Bldg., Indianapolis.
Editor: E. M. SHANKLIN, M. D., 5141 Hohman Avenue, Hammond, Ind.
Managing Editor: THOMAS A. HENDRICKS, 1021 Hume Mansur Building, Indianapolis
Editorial Board:
F. T. ROMBERGER, M. D., Lafayette.
T. B. RICE, M. D., Indianapolis.
PIERCE MACKENZIE, M. D., Evansville.
L. P. HARSHMAN, M. D., Fort Wayne.
ERNEST RUPEL, M. D., Indianapolis.

AUGUST, 1935

EDITORIALS

THE ADVANTAGE OF STERILE MILK

Cow's milk and its products are among the most important elements of our diet and for the early years of life are usually considered indispensable if breast milk is not available. However, milk is often a source of real danger, and according to Soper[1] it is the source of some of the serious diseases relatively common in milk using peoples which are not found in those who do not use cow's or goat's milk. Some of the races inhabiting the wet regions of southern Asia subsist on a diet containing no milk and have a physical development and stamina of the finest type in the world. Dental caries, peptic ulcer, tuberculosis, appendicitis, gallbladder disease, arthritis, erythema, dysentery, poliomyelitis and the common infectious diseases are among the diseases which may be milk-borne infections.

Until recently, perhaps the last twenty years, the death rate from feeding infants by any other than breast milk was terrific, and was essentially due to one thing, contaminated food. The cow is an animal second only to the pig in godliness. Even milk from the best dairies and milk that has been pasteurized continue to reveal the presence of pathogenic bacteria. Pasteurization of milk brought remarkable changes but it has not been enough. Not until sterile milk was used were uniformly good results obtained in infant feeding. That infant feeding now has lost its fear is due to one factor more than any other, the use of sterile milk. This became possible by using boiled milk, evaporated milk, or dried milk. While the good grades of dried milk are not entirely sterile, the cell counts are very low and the organisms present are perhaps not responsible for any pathological disorders.

The controversial battle concerning the virtue of raw cow's milk over pasteurized or boiled milk has nothing to recommend it but the selfish and commercial value for the milk producer in the same way that milk from herds not tested for tuberculosis is of advantage only to the selfish producer. The value of sterile milk and a complete sterile feeding technique is shown in the experience at the Cradle in Evanston as related by Sauer.[2] Here a complete aseptic feeding method and an aseptic general care is maintained. Although such a complicated way will not become popular in the average nursery, its value is demonstrated by this report for infants deprived of mothers' milk, and where many infants are cared for in an institution.

In view of the report of Soper, it would seem that a sterile milk would be advisable in the care of many diseases affecting the adult gastro-intestinal tract, and he recommends evaporated milk in the care of peptic ulcers, colitis, and dysenteries. For the routine feeding of infants a great many pediatricians, including Marriott and Brennemann, have recommended evaporated milk. Considered from every angle, it is perhaps the most routinely valuable milk. In the same way, raw milk must be considered unfit for human use. Pasteurization does not insure that milk delivered to the consumer is free of pathogenic organisms. Boiled, evaporated, or dried milk is the only fit milk for infant feeding and in the light of recent investigations the same opinion will no doubt soon be applied to the adult.

[1] Soper, H. W.: Milk; *Am. J. of Digestive Diseases and Nutrition*, 2: (April), 1935.

BIRTH CONTROL

Restraint in any specific comment on this subject has been due to our belief that it would be wise to await some action on the part of our parent organization, and now that the American Medical Association's House of Delegates has considered the question, we feel free to express an opinion on the subject.

Birth control is a subject that has been discussed both in and out of the profession for many years; however, this discussion has been generally confined to lay groups. Margaret Sanger usually is credited with having been its most enthusiastic advocate, inasmuch as she has devoted most of her time to preaching this gospel over a long period of years.

We believe that the House of Delegates acted wisely in recommending that a special committee study the question and make a report next year. Our only criticism is that we believe this action should have been taken earlier. Birth control has assumed an important place in the discussion of some of our national problems, and we are a bit

[2] Sauer, L.: Enteritis in Infants: Prevention of its Spread, *Jour. of Pediatrics*, 6:753 (June), 1935.

regretful that the A. M. A. has not taken some definite action ere this. Despite the fact that most of the states, as well as the federal government, have at various times enacted legislation against birth control, the use of contraceptives is being almost generally urged by physicians as well as by lay groups. In fact, the thing has become grossly commercialized; hardly a week passes that we do not receive one or more communications from manufacturers of "jellies" and what-nots.

With this before us, a thing of reality and not of speculation, it becomes the duty of the medical profession to assume its rightful control over the situation rather than permit commercial interests to dominate it. The report of the action of the House of Delegates as published in the *A. M. A. Journal* for June 29, 1935, seems to recognize the fact that "physicians want no legislative interference with their right to advise patients on whether to use it or not." Very well said, we think. Who, other than the medical profession, is better fitted to know when such measures should be used? We must, as a matter of course, afford a place for our eugenist friends; we have a liking for eugenics, properly applied. Those of us who live in industrial centers, where living conditions are not always the most hygienic, daily see many evidences of the need of birth control. The report pleases us when it says, ". . . all, however, were united in the attitude that federal and state laws attempting to regulate the giving of information on contraception by doctors to their patients are based on a false premise." The doctor alone, in prescribing for an individual patient, is able to say whether birth control is necessary, and no law can establish a justifiable rule.

Thus does the House of Delegates, after four long years of uncertainty, attack a problem that should even now be well on the way toward settlement. We believe in birth control; we are forced to believe in it by the observations made over a long period of years; we agreed with our Dr. C. O. McCormick of Indianapolis when he wrote an editorial, which appeared in THE JOURNAL some two years ago, in which he asked the question, "Are not three generations of imbeciles enough?"

HOME RULE?

A good many years ago a member of a county medical society appealed from the decision of that body to the Council. It happened that at that time we were serving as Council chairman, and well do we remember poring over the Constitution and By-Laws of the Indiana State Medical Association, seeking therein some solution of the impending problem. We were greatly relieved when we discovered the statement that the county society is the sole judge of its membership. Since then we have learned of many similar instances in various other states, wherein the Judicial Council of the American Medical Association has made a similar ruling.

In the report of the Judicial Council of the American Medical Association as presented at the recent Atlantic City session, chairman Follansbee again cited this ruling, but he proceeded to wonder if, after all, this is a wise decision. Quoting from the report, "Ordinarily, under present by-laws of county, state, and national associations, procedures to correct an unethical practice must be instituted by the county medical society by preferring of charges which, in practice, is left to some individual who feels aggrieved. Few individuals feel it their personal responsibility to prosecute a breach of ethics that affects them but little personally, though it may affect the medical profession in a major degree. The institution of charges by an individual in such cases of general concern might very probably amount to professional suicide. Seldom does an individual desire to place himself in the position of prosecutor for the benefit of the profession as a whole. In so doing he is likely to bring upon himself the unfriendliness and antagonism of colleagues often in influential positions."

The report proceeds to compare our procedure with that of the courts where we have an entirely different set-up, that of grand jury, prosecutor, and an impartial court, from whose decisions appeal can be made. It is frankly suggested that medicine needs just such a system of enforcement, particularly in the larger county societies. Again quoting, "The Principles of Medical Ethics, while followed by a large majority of the profession, are looked upon only as a theory by some in the profession and considered—if considered at all—by many not in the profession as simply a uniform to be worn while 'on parade'."

The complete report is worth the time of any physician who will read it; it fearlessly opens the way toward remedying one of the besetting evils of our present system. It is due to this system that more unsettled squabbles are hanging about our county medical society groups than from any other cause known to us. Having been officially connected with medical organizations for many years, we have seen many, many instances of this very thing, cases which the outside agencies such as the state association or the Judicial Council of the A. M. A. would have considered as amounting to little or nothing. Only a year or so ago, our Council was "pestered" with what amounted to little more than a "clothes-line scrap," yet we spent no little time on the case. Had the matter been referred to the Council in the first place, the whole thing could have been adjusted in a trice.

A little while ago we dared take a little fling at the Code, together with the "ancient" system under which medical organizations are operating; we figuratively held our breath, lest 535 North Dearborn Street accuse us of high treason or some other felonious crime. Thus, when the Judicial Council, to our mind the most important and the most in-

fluential group in the medical profession, says that we need some changes, we feel justified in our boldness. If the various suggestions offered by the Judicial Council are adopted at some time in the future, we shall welcome the changes.

THE GRADING OF MEDICAL SCHOOLS

Something over a quarter of a century ago the American Medical Association undertook the enormous task of attempting to do something about the great number of inferior medical schools which at that time were turning out inadequately trained graduates by the hundreds. Rather promptly the number of schools was cut in half, and a much more effective phase in medical education was instituted.

For many years the educational number of the *Journal of the American Medical Association* has been devoted to problems of this sort, and has contained much valuable information for those who wish to keep abreast of the medical educational trends. In the past year another project has been undertaken, namely, that of inspecting the various medical schools of the United States and making recommendations whereby the institutions might improve their service to the profession and to the public. This work is being pushed forward as rapidly as is compatible with a thorough study of the problems involved. We are in receipt of a statement by William D. Cutter, M. D., secretary of the Council on Medical Education and Hospitals of the American Medical Association, which reads as follows: "Last year forty-five schools were visited and it will take all of next year to complete the field studies. The final report of the council, therefore, can hardly be available before the latter part of next year or possibly early in 1937." Until the report of the council is made public, no changes in rating will be made, and any statements that a given school has been raised or lowered in standing will not only be in bad taste but absolutely unauthentic.

This inspection and study of the medical schools and of the underlying facts in medical education should be of the utmost value to the profession, inasmuch as it will indicate to us where we are going and what procedures should be followed. There are many in the medical profession who believe that too many graduates are being turned out, and it is hoped that this study will have some influence in ascertaining the number needed, and the best means of educating them. As soon as the problems of a particular school have been correctly ascertained, recommendations will be made to that school whereby it may improve its teaching and its status. To date none of the schools inspected have been so advised officially by the council.

The profession in Indiana will be very interested indeed to know how our own institution fares in an inspection of this sort, but we have every reason to believe that it will be more than able to retain the high standing which it has held for many years. As a matter of fact, we feel that it has weathered the difficult years immediately past, better than a large percentage of other institutions with wonderful equipment and fine prestige, who have been compelled to curtail their activities and their plans because of large cuts in their budgets.

The physicians of Indiana owe it to themselves to visit the Medical Center in West Indianapolis and to make themselves acquainted with the splendid group of hospitals and institutions of learning. Very few other medical schools have such an abundance of clinical material as does the Indiana University School of Medicine. The profession should also make itself acquainted with the wonderful medical library, which incidentally is available for use to anyone who wishes to read up on any special phase of the science. Considering the age of the institution (it became a part of Indiana University in 1908), the local medical school is one of which every member of the profession has reason to be proud.

THIS PUFFING BUSINESS

Years ago there was a considerable traffic in the publishing of "county histories," which were large volumes, chiefly devoted to groups of laudatory biographies of those residents who contributed sufficiently to the promoters. We recall such a compilation concerning Carroll County; it really was a work of art with its full page lithographs of the homes of the elite in that part of Indiana; we also recall that as much as $250 was paid for some of those pages.

In later years such editions have become rather rare, and in their stead has sprung up a new form of the same old "come on" game, and this new form has acquired the unsavory name of "puff sheets." These publications ordinarily have rather high sounding names, and their headquarters generally are found along the Atlantic seaboard. From such a concern, President Walter J. Leach has received a letter stating that the forthcoming issue of the *Journal of American Business* would contain "a feature article which commends your activities as president of the Indiana State Medical Association and reviews that association's record of service to the state." The letter continued to state that the proposed article would be of current interest and would be based on reliable information. Not one bit of information was sought from Dr. Leach or from the headquarters of the Association. Just where and how they got their "reliable information" is quite beyond our ken.

Several points about this letter to Dr. Leach seem to deserve consideration. As we have mentioned, from what source did they derive their information? Why were they in such a hurry to get

the consent of Dr. Leach? They suggested that he answer immediately, either by letter or wire, then they say that they would be glad to check the article with Dr. Leach. All of this seems to be just a part of the general scheme to "hook the fish." If Dr. Leach had replied, and agreed with their scheme, then there would have been a leverage with which to urge him to purchase a considerable number of copies, and that is the key to the whole situation. It is unbelievable that a magazine of dignity and influence would get together a "puff" article without in any manner consulting the puffee, *then* submit the matter to the individual most concerned.

We made inquiry regarding this particular magazine, and the American Medical Association's Bureau of Investigation at once wired the National Better Business Bureau in New York, and received definite information that the magazine is a puff sheet.

Once more we have occasion to congratulate the Indiana State Medical Association upon having officers who are on the alert and who are not even slightly tempted to fall for puff sheets. We have written to the editor of the *Journal of American Business*, asking for a copy of the material which they propose to publish, but as yet no reply has been received.

AGAIN POLITICS

How long, oh, Lord, how long shall we have to put up with politics messing up affairs that should be purely medical? Two years ago we had complaint after complaint against the ruling of the Barbers' Board when they chose to ignore the medical profession as a whole and to appoint local examiners without consideration of the fact that the Indiana State Medical Association was the sole source of information as to who is who in medical Indiana.

Now we have another board, the newly created Board of Beauticians, or some similar high-sounding title. Whatever its name, the fact remains that the politicians again have taken the reins in their hands, and have made appointments of examiners for those seeking licensure at the hands of this new Board. We are receiving complaints from our own members to the effect that they are not permitted to examine their own patients. We have had several candidates for licensure call up to inquire why they cannot go to their own doctor. Doctors want to know why it is that they cannot make these examinations for their regular patients. Our answer is, of course, POLITICS!

We have no complaint against the several appointees with whom we happen to be well acquainted; they are reputable, competent men, but because of the fact that politics dominates the situation do we strenuously object; it is a high-handed procedure, one that is bound to react in a manner most disconcerting to the powers, one of these days.

Somehow or other it seems that POLITICS gets messed up with a lot of things. In one of our larger counties we have a tuberculosis sanatorium that has been in operation for years; the medical superintendent is generally conceded to be the peer of any physicians engaged in similar work. For all these years the question of politics has not entered into the picture until within the past few months. Now things have come to a pretty pass; one of the county commissioners "got a mad on" with the chairman of the Board, a gentleman who gave most liberally of his time and talents—of which he has many—in the furtherance of the institution and its work. Just recently this man has been "fired" by the county commissioners, wholly because of political considerations.

It is not only about time that the medical profession assert itself and its influence; it is HIGH TIME that they do so. There are certain phases of our civic and economic life that belong to the medical profession; the great majority of the residents of the State of Indiana continue to look to our profession for guidance in such matters; it is up to us to support that confidence; it is up to us to assert ourselves and again take over the duties that rightfully belong to us.

EDITORIAL NOTES

JAMES TATE MASON, M. D., of Seattle, Washington, president-elect of the American Medical Association, has accepted an invitation to be a guest speaker at the Gary session of the Indiana State Medical Association, October ninth. Have you made your plans to attend?

DRS. MATTEW WINTERS, H. F. BECKMAN, E. O. ASHER, and J. C. CARTER have been appointed to cooperate with Dr. Verne K. Harvey, Director of the Indiana Division of Public Health, in carrying out the medical features of the Social Security Act in Indiana. Drs. Winters and Beckman were appointed by Dr. Gatch as representing Indiana University, and Drs. Asher and Carter represent the Indiana State Medical Association on the committee.

NATURALLY we are regretful that the American Medical Association is not to visit Indiana in 1936, but we shall have to confess that we hardly expected a favorable report as to the physical facilities possessed by our capital city to entertain such a large convention. Other years are coming, however, and it is probable that hotel and convention hall accommodations will be duly increased and

that in time the Hoosier state will be host to this great gathering of physicians.

RECENTLY we have read of the theft of several microscopes in various parts of the United States. Within the past few weeks, an Indiana physician has reported the theft of his Ernest Leitz Wetzlar binocular microscope, valued at four hundred dollars, and carrying the serial number 212351. It is possible that the thief may try to dispose of the instrument to another physician; if any one offers you a microscope, examine it carefully for the serial number and manufacturer's name.

IF YOUR county society has not already held a picnic it is by no means too late to arrange for one. Lake county has had such an event each year for several years past and most of the members look forward to it with great anticipation. We used to have it as a family affair but recently it has developed into the stag variety, which is probably productive of more good fellowship and is more of the get-acquainted variety. Golf occupies the afternoon attention of most of the attendants and an old-fashioned chicken dinner, family style, serves to bring the festivities to a close. To those societies which have never attempted a picnic, we say, by all means, get going; it will do your society a lot of good.

COINCIDENCES are queer things; they come along most unexpectedly, of course. One day we write an editorial regarding a "puff sheet," down in New York City; the same evening we find in the home town paper an article taken from the self-same magazine, the *Journal of Ame ican Business*, "puffing" away, telling what a wonderful success one of our county officials is making in the management of his office. A careful scrutiny of the article fails to reveal a single sentence that could not be used in connection with any one in any official capacity. It would be very interesting to know just how many copies of the magazine were ordered by this official and just what the tariff was on the order.

SOME little while ago we published several notes regarding the non-recognition of Indiana members in the official American Medical Association family; we also published some charts, showing the distribution of these officers over a period of several years, and Indiana made a sorry showing in those charts. We had hoped that when the "plums" were being passed at Atlantic City some of our folks would be recipients. We are disappointed, of course, and we trust that at some future date we may be remembered. Indiana takes her hat off to no other state when it comes to matters of association activities. We go out and do things, long before most other states get started. We even cast about for things we believe should be done, then go ahead and do them, without being asked!

IT SEEMS that Dr. E. H. Cary had several reports of interest to present to the House of Delegates at the Atlantic City session, among them being his comment on the work of his committee with a group from the American Legion. This committee was especially interested in the hospitalization of ex-service men, one of its major points being that there was no need for further building of hospitals for this purpose. Dr. Cary reported that the Legion had kept faith with his committee and that all appeared to be well at the present time. We must compliment our fellow-member, Dr. Franklin S. Crockett of Lafayette, for the very excellent work which he did on Dr. Cary's committee, for we happen to know something about the enormous work done by Dr. Crockett in this connection, and we herewith give him full recognition.

SEVERAL newspapers recently have carried items concerning a survey conducted by the Children's Bureau of the Department of Labor, which reported that a lack of medical treatment is "the most disturbing feature about the whole question of health." The survey was made in selected areas of five cities, one of which was Terre Haute, Indiana. According to the statement, 43 per cent of the families surveyed needed medical treatment at the time of the survey, but it was not being received, and in 30 per cent of the cases the reason was that the family could not afford private care. Some question has been raised concerning the justification of the statements by the Children's Bureau, and a check is being made as to their source and accuracy. Such statements naturally will promote ideas in favor of compulsory sickness insurance. We shall have more to say on this subject in a later issue.

AN ARTICLE on "hobbies" in the July JOURNAL seems to have been of more than ordinary interest to many of our readers. We all have some sort of a hobby whether we care to admit it or not. Until recently we could not understand why a busy physician might choose tropical fish as one of his hobbies, yet we know several physicians who have extensive collections of these diminutive pets. Our youngest scion somehow or other got interested in tropical fish, and before we knew what was really going on, we had a "right smart" collection of guppies, platys, scalaras, black Mollies, sword tails, and others that we never have been able to classify properly. Well, sir, before you could say "Jack Robinscon" we got interested in these little chaps to the extent of becoming a devotee. If you want diversion that is different, which will not prove too expensive, nor take too much of your time, just get

a "start" of tropical fish. Play around with them for a few weeks, and we promise you a lot of enjoyment.

JOHN A. KINGSBURY seems a bit peeved at a few medical organizations, specifically naming the New York State Medical Society, the Detroit Medical Society, and the Indiana State Medical Association, claiming that these organizations grossly misrepresented him. We are not speaking for either of the other two societies, but as for Indiana, well, we have nothing to explain and nothing to retract. We felt that we had a grievance against this gentleman and proceeded to air it as we thought it should be aired. Of course, our resentment was first aroused when, at the time of the Indianapolis meeting of the American Public Health Association, he gave forth an interview, widely printed, in which he declared that Indiana had abandoned its State Board of Health! From that time we had what we believed to be just reasons for a quarrel with Kingsbury and proceeded to do a little shooting; so, as we said before, when the news reached us that Kingsbury had lost his soft berth with the Milbank Foundation, we felt that it was no occasion for tear-shedding on our part.

A YEAR ago we entered a justifiable complaint concerning the highly publicized statement issued by the American College of Surgeons regarding that very important medico-economic problem, socialized medicine. It will be remembered that this pronouncement was given to the lay press on the day of the opening of the annual session of the American Medical Association at Cleveland. Just a year later, Dr. E. H. Cary made the important announcement to the A. M. A. House of Delegates at Atlantic City that hereafter the college would leave the solution of economic problems to organized medicine. Thus after a year does the muddle become clear, but only after organized medicine had declared its position in no uncertain terms. We are especially proud of the part Indiana medicine played in this controversy; THE JOURNAL vigorously attacked the move on the part of the college, and Indiana members of the college lodged an emphatic protest against the unwarranted action of that organization. However, the problem is now settled, and we congratulate the College of Surgeons on its present attitude.

A LITTLE note in the "Capitol Dome" column in THE JOURNAL for July carried the information that some five hundred barbers' licenses had been revoked because of the fact that these licensees had syphilis or tuberculosis, the former greatly predominating. This would seem to be a sufficient reason for the requirement of a physical examination, including a blood Wassermann, of all applicants. We also note that the beauticians' board has the same sort of requirement and it is to be expected that a rather large number of applicants will be weeded out for the same reasons. But what about food handlers? In some of our larger cities all restaurant employees are required to supply the board of health with a so-called health certificate; that has also been required of those serving food in establishments in which alcoholics are sold. However, the medical fee in the latter case is usually two dollars and a blood Wassermann seems not to be required; in many cases the physicians make little more than a casual inspection of the applicant. We are of the opinion that food handlers should be required to undergo the same sort of examination as that required of barbers and beauticians; unless this is done the so-called examinations are purely farcical.

DAVID DIETZ, the clever writer of "Today's Science" in the Scripps-Howard newspapers, writes entertainingly and prophetically on the "hormone survey" in infancy. He declares that due to this study in early life it is more than probable that a "life of health will be assured future generations." He further states that "when the day comes, the skill of the surgeon will be required chiefly for the treatment of wounds and broken bones." Again quoting from this interesting narrative, "diseases of the heart and other vital organs, maladies of the nervous system, and derangements of the ductless glands, may be anticipated and prevented in the future just as public health measures now anticipate and prevent the contagious diseases of childhood." Mr. Dietz has recently attended sessions of the Federation of American Societies for Experimental Biology, the American Philosophical Society, and the American Chemical Society; from these meetings he seems to have correlated many of the thoughts expressed in the various programs and to have arrived at the conclusions above quoted. He concludes his writing with the statement, "As yet the physician does not have exact knowledge. It is certain that all of the hormones are not even known. But progress is being made."

IT SEEMS that our dental friends have somewhat changed their opinions regarding infections arising from pulpless teeth. Some fifteen years ago, according to a recent article by A. J. Cottrell, in *The Journal of the Tennessee State Medical Association*, for May, 1935, the dictum went forth that all pulpless teeth should be immediately extracted. Following this the exodontists had a veritable field day and wholesale extractions were the order of the day. Dr. Cottrell states that during the early part

of the period many of his patients who had occasion to visit a well known clinic came back with these teeth removed; now they return with orders to visit their local dentist and have proper root canal fillings done. The article goes on to declare that the trouble with pulpless teeth arises from the fact that too many dentists do not have the knack of properly caring for them, that the art of filling root canals is one acquired after a long experience. We are quite inclined to agree with Dr. Cottrell. For many years past we have had occasion to study the effects of improperly filled root canals and have been able to trace many infections to this cause. Certain it is that teeth which a few years ago were condemned are now saved and prove to be of no further source of trouble or annoyance to their owners.

Southern Medicine and Surgery for June, 1935, gives voice to a thought that has often occurred to us, that the prosecution of quacks should be a duty of health officers. True it is that more or less directly does the Indiana medical practice act lay this duty upon the Indiana State Board of Medical Registration and Examination, but even while we were a member of the Board we felt that health officers, above all others, should shoulder this task. After all, the enforcement of the medical law is nothing more than an added protection to the health of the residents of a state; in many cases it becomes a matter of far greater import than health protection, it protects life itself, for many deaths are directly due to the "ministrations" of quack practitioners. The article indicates that it is surprising that quacks, when brought to task for their wrongdoings, do not make answer to the effect that if they are a health menace, then the prosecution should be made by the official health guardians. Too commonly are we asked to suppress this or that quack menace, these requests coming to us probably because of our former connection with the Board; we believe that we shall accept the advice of the editor of *Southern Medicine and Surgery*, and henceforth refer these cases to the proper health officials.

DR. W. D. BRETZ, county health commissioner for Dubois county, comments on a recent editorial in THE JOURNAL, "The Proposed State Welfare Act." He declares that the editorial is misleading in that it seems to have been written as a warning when, in fact, the "thing" is actually with us, so he says. He goes on to declare that proof of this lies in "the dictatorship assumed by some directors of relief in their choice of hospitals and in the determination of fees." Dr. Bretz opines that, one of these days, he will find in his mail a definition of his duties as health commissioner, the definition made by the director of relief. In many respects Dr. Bretz is correct in his opinions; we feel that, should the proposed set-up go into effect, here and there over the state will be directors, some without any practical experience, who will be undertaking duties that should lie wholly within the province of the medical profession. We seem not to forget that Indiana has for some years had a considerable number of "health officers" who are in no wise connected with the healing arts and who have had not even a semblance of the training necessary to a competent understanding of health problems. Of course, this proposed program is not yet a reality, but it appears serious enough to demand the attention of the profession.

A LETTER published in the July first issue of *Time* expresses gratitude and satisfaction in the knowledge that Jane Todd Crawford has received some deserved repute and approbation through the erection of a monument in her memory at Lexington, Kentucky, as the woman who courageously became Dr. Ephraim McDowell's patient for the first known ovariotomy operation. The letter writer, whose father was a physician, said that her father had often mentioned Jane Todd Crawford's bravery, and felt that a monument should be erected in her memory. This is some indication of the interest that lay people have in such events. Recently our own Bureau of Publicity has suggested that the various woman's auxiliary societies promote pilgrimages to the graves of four Indiana pioneers: (1) Mrs. Jane Todd Crawford, who is buried near Sullivan, Indiana; (2) Jonathan Richmond, buried at Covington, Indiana, who performed the first Caesarean section in America west of the Allegheny Mountains; (3) John Stowe Bobbs, buried at Crown Hill, Indianapolis, who performed the first gall stone operation in the world; and (4) Mrs. Z. Burnsworth, Dr. Bobbs' patient, who is buried at McCordsville, Indiana. Perhaps some of our physicians will want to visit these spots, if they happen to be convenient, on a week-end or vacation trip.

TO THOSE who are disciples of Izaak Walton, and the host is legion in medical circles, we are sure the ruling of the Indiana fish and game commissioner, to the effect that he may establish regulations to fit certain waters and certain sections of the state, will prove most agreeable. Spawning season, for instance, may vary for a period of several weeks in different points of the state; water conditions may arise that make it advisable to close certain waters for the short periods of time; thus it is well that the commissioner be empowered to use his best judgment in such cases. While considering the subject, we want to compliment the

proper authorities for the present "brand" of game wardens. On July Fourth, while at Koontz Lake, we had the pleasure of meeting the warden for Starke and Marshall counties and to see him "check the lake." We have met a good many game wardens in our time, most of them of the rough-neck, whatinell-are-you-doing variety, so that it was a pleasure to see this chap in operation. In his quiet manner he checked over the fishing folks on that lake, looked over their catch—if any—admonished certain ones that they were not wholly within the law and, in general, made it a very pleasant afternoon for those who had inadvertently failed to get a license or had kept an under-sized fish. We like that sort of thing.

IN THE passing of George Dewey Miller of Logansport the Indiana State Medical Association has lost one of its most colorful characters. George Miller was, first, last, and all the time, a devotee of organized medicine; he was a staunch supporter of his county medical society, an untiring worker in the ranks of the eleventh district society, and in the Association he was untiring in his efforts to further Indiana medicine. Recently he had been serving as councilor for his district, and had proved most popular in that capacity. George will be sorely missed at our annual session, particularly in the House of Delegates, where he was the perennial chairman of the Credentials Committee, and his House roll calls long will be remembered as one of the outstanding annual events. Dr. Miller served four years in the Indiana State Senate, making an enviable record therein; during his first session, illness interrupted his work, but in the recent session he established himself as a careful observer, a student of legislative matters and, once he had formed an opinion on a matter, he was to be found battling for what he believed to be right. He was of valiant service to the medical profession in the legislature, making many friends for the profession by the manner in which he conducted his campaign for or against measures affecting his profession. A most genial character, a hail-fellow in every particular, George Miller made and held a host of friends; he will live long in the memories of all who knew him.

PHYSICIANS are notoriously reticent when it comes to talking about their own profession and its problems. That attitude may have been commendable in the past, but now the thing for all of us to do is talk, talk, talk, to all who will listen, and emphatically impress our listeners with the idea that the medical profession is a unit in its opposition to socialized medicine. There is a vital reason for this talking campaign at present. High school and college youths all over the United States are gathering data for debates on the subject of socialized medicine. We have had an opportunity to see some of the material assembled, and the profuse literature supplied by those who favor socialized medicine will have its lasting effect upon all of these young debaters unless we, as members of the group most interested, are able to bring the point of view of the medical profession to the attention of patients, women's clubs, men's business clubs, chambers of commerce, and similar organizations. Probably some of the high school youths of your own community will call upon you to ask your opinion of socialized medicine. Prepare yourself to give them logical reasons for your opposition. The results of these debates may have far-reaching effects; the impressions of youth, deeply rooted, become the convictions of the man. We do not ask you to bore your patients or your friends with long tirades against state medicine; such procedures obviously would be detrimental to the individual and to the profession as a whole. However, opportunities will arise frequently when you may politely but emphatically express your reasons for wishing to maintain the present system of medical practice in the United States, and whenever such opportunities present themselves, take advantage of them; you will be doing for yourself and your profession a worthwhile service.

VACATIONS, dog days and swimmin' holes are all in order this month, all of which should receive more or less attention from the medical profession. Vacations should have special consideration, for any physician who does not take at least one vacation each year is not playing fair, either with himself or with his patients. The man who sticks to the job, day after day, and without any let-up, goes stale, and a "stale" physician is wholly without the pale. Dog days and swimmin' holes should receive our most careful attention, not that we particularly believe in the old superstitions anent those August days in which dogs are presumed to go mad, but because this swimmin' hole business is a most serious one. Somehow or other, back in the Carroll County days when Bachelor's Run and Wild Cat creek furnished the headquarters for various aquatic sports that were in vogue a half century ago, the matter of clean water and freedom from athlete's foot seemed not to bother us; in fact, we never heard much about either one. Running water was supposed to be sufficiently sanitary for bathing purposes and while there was an occasional case of ring worm in the neighborhood, we knew nothing about this sort of foot trouble. Stone bruises about the plantar surfaces of our heels were common and we believed them to be acquired by our habit of going "barefoot." Nowadays, however, the choice of a swimmin' hole is a more serious

matter. There are many things to be considered. Stream pollution has become mighty common in Indiana these past few years; few are the streams that should be considered really safe for bathing purposes. The same thing may be said of some of our smaller lakes. An added hazard, this year, lies in the fact that our streams and lakes are more or less filled with surface drainage, due to the heavy rainfall of the last several weeks. Thus it behooves the physician to be on guard for himself and his family as well as to see to it that his patients are warned of the dangers to be encountered during the remainder of the summer.

OUR publicity bureau has issued a timely bulletin on "Appendicitis," directing the attention of the reading public to the fact that delay in the treatment of this ailment materially lowers the chance for recovery. The statement is based on a study of the cases at the Indianapolis City Hospital and the university hospitals, as published in an original article in the July JOURNAL. The publicity committee is to be commended for thus bringing such an important matter before the lay public. It is a rather unsatisfactory commentary when we study the Indiana death rate from appendicitis during the past decade. In 1925 the number of deaths from appendicitis was 447; ten years later there were 470 such deaths. In the same period the death rate from a number of diseases has been materially reduced. Thus do we continue to have before us the problem of what to do to reduce this mortality rate. There are two major elements in this and the first is delay in receiving attention; this includes the element of delay on the part of the attending physician, a thing that too often is quite apparent. The second is the all too common habit of giving laxatives for any and all abdominal distress. Again do we have offending physicians in this regard. While it is true that our health columnists, especially those having large followings, devote several articles to the subject each year, we believe that there is not enough of this; the lay public must have it hammered home that an acute belly is potential disaster; that home remedies, especially laxatives and cathartics, are absolutely taboo, except on the express order of a physician. There is another reason for complaint—the all too common habit of some physicians to prescribe for an acute abdomen via 'phone. This should never be countenanced; given the information that a patient has such a condition, every effort should be made to see the patient at once. Appendicitis mortality is too high; it has changed little in the past several years; much of this is preventable and it is squarely before the profession to do those things that will bring it down to a reasonable level.

ATTENTION of our JOURNAL readers is called to an editorial in the July issue of the *American Journal of Surgery*, ably written by its editor, Dr. Thurston Scott Welton, titled "Hospitals Should Not Practice Medicine." One paragraph is quoted in part; one in full:

> When this type of plan becomes universal the physician who has seen his practice taken from him, in part, by pay and free clinics and other agencies, will have a pernicious set-up to combat . . . the first thing we know the physician will be out in the cold. One can imagine further and see the hospital staff men hovering in the background as guardian angels to guide the internes, if necessary.
>
> In many places hospitals are practicing medicine. Call it by some other name but after one gets down to rock bottom they are competing with the doctor. In Brooklyn, N. Y., for example, eleven hospitals accept obstetrical cases for a flat fee. For example, a pregnant woman applies for hospital and obstetrical care. If she can pay fifty, sixty, or seventy dollars (and no questions asked) she is accepted. An interne, resident or in some cases an attending obstetrician cares for her, all for the flat sum paid. The hospital gets the entire fee. The patient is not considered a charity patient. In the same city, seventeen hospitals admit patients for the removal of tonsils and adenoids under the same plan (it averages about $15.00 or $20.00 in full); and five hospitals contract to give a course of treatment for the relief or cure of hay fever."

Look up the editorial and read it in its entirety. Just as surely and certainly as the idly floating chip in the innocently flowing brook is carried unaware to the larger and deeper river and thence to the limitless sea, just so surely and just so certainly would our profession, almost child-like in its trusting simplicity, be drawn irresistibly into the destructive vortex of politico-regimented state socialism unless we militantly assert our rights and privileges—the safeguarding of the public weal. How sad that would be!

DON'T FORGET—

THE ANNUAL SESSION

AT GARY

OCTOBER 8, 9, 10, 1935

TOWNSHIP MEDICAL AID FOR THE INDIGENT

CHARLES B. MARSHALL
DIRECTOR OF FINANCE, GOVERNOR'S COMMISSION ON UNEMPLOYMENT RELIEF

The respective trustees of the various townships of the State of Indiana are designated as overseers of the poor. As such overseer of the poor, the law directs that "he shall, *in cases of necessity*, promptly provide medical and surgical attendance for all of the poor in his township who are not provided for in public institutions." The law also directs that the overseer of the poor shall not extend aid to persons or families unless an affidavit setting forth the personal condition of the family has been filed with the trustee as overseer of the poor.

INCREASE IN RELIEF TAXES

Poor relief taxes in the year 1925 amounted to $680,000. For the year 1934, poor relief taxes amounted to $8,000,000. Medical costs increased proportionately. Such increases in expenditures called for additional safeguards.

LEGISLATIVE PROCEDURES

In recodifying the poor relief laws of the State of Indiana, the recent legislature directed that immediately upon the passage of the Act, "The State Board of Accounts shall adopt uniform forms and books and make necessary regulations in accordance with the terms of this act so that the method of accounting for poor relief . . . shall be uniform in each county of the state with respect to all townships; and the said department shall cause its field examiners to make a special audit, as soon as possible, to determine that this has been done."

In accordance with these instructions of the legislature, the State Board of Accounts has prescribed certain forms for the granting of medical aid by the overseer of the poor. These forms are illustrated in Figures 1, 2, and 3. At the request of the Indiana State Medical Association, an attempt is made in this article to explain them from the viewpoint of the medical profession.

ORDERS FOR MEDICAL AID

When granting a purchase order for medical aid, the overseer of the poor must first determine whether the family is entitled to relief. He must also determine the necessity of the medical aid proposed. The latter involves a professional decision which the trustee as a layman can not directly make. He can, however, require such evidence as to the *necessity* of the medical aid as is reasonable in order to assure himself that the expenditure will be legal.

The essence of any system of handling medical aid for relief clients is found in the following formula: "*Prior* authorization of *necessary* medical aid to *approved* relief clients at an *agreed* price at the *lowest* possible cost to the township." The five elements that have been emphasized are those required by the law. The overseer of the poor is directed to obtain all relief at the lowest possible cost to the township.

PURCHASE ORDER FOR MEDICAL AID

In Figure 1 is shown Township P. R. Form 2, Purchase Order for Medical Aid, which has been prescribed by the State Board of Accounts. The instructions on this form are very explicit and should be carefully followed. This is the purchase order to be issued by the overseer of the poor or the relief officer to relief clients when they come to the office for medical aid. It is taken to the doctor's office by the client. Only such services as are authorized on the purchase order are to be charged to the township when furnished.

All purchase orders for medical aid, including hospitalization, drugs, and other items, must be ordered on this blank. When a doctor receives such a purchase order, he may make a report of one item of medical aid rendered on the back of the form. The report on the back can be used for only one charge such as one office call or one house call. If more than one service is authorized on the purchase order, a separate report must be made on Township P. R. Form 4, Report on Medical Aid Rendered, which is illustrated in Figure 2.

SEPARATE REPORTS FOR EACH SERVICE

It is very important that physicians and surgeons understand that there must be a separate report of each medical aid service rendered and that each report must be signed by the patient and the doctor. If there are two calls authorized on the purchase order, then there will be two reports, one of which may be on the back of the purchase order, and the other on Township P. R. Form 4, or both may be made on Township P. R. Form 4.

It is not necessary to obtain the signature of the patient twice for one service rendered. If a report is made on the back of the purchase order, Township P. R. Form 2, for a call, it is not necessary to make another report of the same call on Township P. R. Form 4 and vice versa.

EMERGENCY SERVICE

It is desired that the client first contact the relief or trustee's office and obtain the purchase order for medical aid before going to the doctor. In the case of an emergency service where this is not possible because the office is closed or there is insufficient time, or the trustee can not be located, the doctor can fill out the report on Township P. R.

Form prescribed by State Board of Accounts — OVERSEER OF THE POOR — Township P.R. Form 2—1935

PURCHASE ORDER FOR MEDICAL AID

TRUSTEE'S OFFICE

Purchase Order No. 301

East Township, North County, Indiana. June 3 1935

TO Dr. A. M. Witherspoon

PLEASE SUPPLY Jesse James CASE No. A-2431

Address Three Mile Road near Jonesville

WITH THE FOLLOWING SERVICES

Office Call	$	Hospitalization (itemize fully)	
House Call	$		
	$		$
(Calls include all usual and ordinary medicines)		Surgery (describe fully) Setting broken right leg below knee	$ 15.00
Unusual Medicines (itemize fully as to quantity, price, kind and necessity. Limited to U.S.P. and N.F.)		Other Medical Services	
	$		$
Mileage, not over 8 miles. (one way only outside city limits)	$ 2.00	O. B. Case, including all prenatal and postnatal care	$
Tooth extraction, child's Teeth	$	TOTAL AMOUNT OF THIS ORDER	$ 17.00
Tooth extraction, adult's Teeth	$		
	$		

Statement of patient as to illness Leg broken below knee

Disbursing Clerk John Adams Authorized by Ben Burnsides Township Trustee

INSTRUCTIONS: This form to be made out in triplicate; original to doctor or vendor, duplicate filed alphabetically in relief office, triplicate remaining in book in numerical order. Use indelible pencil or ink. Do not use check marks. Write out number of services authorized in words (as "one").

Wherever possible, at the time the purchase order is written, the total amount of the order must be inserted in the space provided for the same.

Purchase orders are valid only for the month in which they are written. Thus, an order given on the 20th day of the month would be void after the last day of that month insofar as permitting the recipient thereafter to obtain relief. Obtain new purchase order from Trustee if necessary in order to carry out this requirement.

All poor relief claims rendered, etc., will be on a calendar month basis. Claims must be rendered on the basis of the last past calendar month and for no other period.

Doctors or vendors are required to return their copies of poor relief purchase orders at the time they file their monthly claims. Such monthly claims must show the purchase order number for each charge billed the Trustee's office. A separate claim must be filed for each township.

A report blank containing both the signature of the patient and the doctor or vendor must be submitted with the claim for each office call, house call or other service for which a charge is rendered. Any charge shall not exceed the amount prescribed in the fee schedule in force.

Required by Governor's Commission on Unemployment Relief (Front) 200M—5-35

Showing Doctor's report on back of Purchase Order. Note approximate mileage on order and actual mileage on report.

Form Prescribed by State Board of Accounts

REPORT ON MEDICAL AID RENDERED

On Purchase Order No. 301 Dated June 3, 1935

East Township, North County, Indiana

Name of Patient Jesse James Date of Service June 3, 1935

Address Three Mile Road Case No. A-2431

Diagnosis Right leg broken below knee

SERVICE RENDERED

Office Call	$	Hospitalization (itemize fully)	
House Call	$		
	$		$
(Calls include all usual and ordinary medicines)		Surgery (describe fully) Setting broken right leg	$ 15.00
Unusual Medicines (itemized fully as to quantity, price, kind and necessity. Limited to U.S.P. and N.F.)		Other Medical Services	
	$		$
Mileage, 7 miles. (one way only outside city limits)	$ 1.75	O. B. Case, including all prenatal and postnatal care	$
Tooth extraction, child's Teeth	$	TOTAL CHARGE	$ 16.75
Tooth extraction, adult's Teeth	$		
	$		

PATIENT'S RECEIPT

I have received in full the items and services listed above and authorized by this order.

Signed Jesse James
(Patient or head of household)

DOCTOR'S OR VENDOR'S STATEMENT

I have furnished the customer with the full amount of services, or other items authorized by this order.

Signed A. M. Witherspoon

INSTRUCTIONS: Report on medical aid rendered may be submitted either on this form or on the separate report blanks, Township, P.R. Form 4, furnished to the doctor or vendor in triplicate.

Do not charge for any miles except those actually and necessarily traveled outside of the city limits for the purpose of the call. Calls to be grouped whenever possible in trips. Only one mileage charge allowed when more than one call made on same trip or in same household. Mileage to be charged one way only.

When purchase order authorizes more than one call or service, separate report blanks must be submitted for each and every call and service rendered. This report can cover only one charge. Every charge must be specifically authorized by purchase order. Amount authorized by purchase order cannot be exceeded. A supply of separate report blanks for the use of the profession or institutions will be furnished upon request by Trustee's office.

Required by Governor's Commission on Unemployment Relief. (Reverse) 200M—5-35

Twp. P. R. Form 2
Purchase Order for Medical Aid

Fig. 1

Form 4 as illustrated in Figure 2, obtain the signature of the patient, and later get a purchase order from the relief office *if the patient is entitled to a relief order,* and provided the doctor reports the emergency service within twenty-four hours or, if over the week-end, within forty-eight hours. The practice of waiting until the end of the month before obtaining a purchase order for medical aid is not contemplated under the law, and must be discontinued.

In Figure 1, Jesse James, relief client, received a purchase order from Ben Burnsides, township trustee, for the setting of a broken leg, and mileage not exceeding eight miles, on purchase order No. 301. The family had been on relief and a member of the family obtained the order from the trustee. When the doctor had rendered the service, a report was written on the back of the purchase order itself. The patient's receipt was obtained, and the physician himself signed the report. Mileage was charged for seven miles.

PHYSICIANS MUST FILE CLAIMS MONTHLY

At the end of the month, Dr. A. M. Witherspoon must obtain from the township trustee or from the county auditor a poor relief claim blank, County P. R. Form 7. This blank must be filled in as indicated on the blank. The claim will show the date of the purchase order, number of the order, kind of relief, recipient's name and the amount charged. A separate claim must be filed against each township. Services rendered in different calendar months must be filed on separate claim blanks. The doctor will swear to the claim before a notary public or before the township trustees, or before any officer authorized to administer such oaths.

The regulations of the State Board of Accounts prescribe that "the physician, surgeon or hospital or other vendor must itemize fully on the back of the medical aid purchase order, the exact services rendered or items supplied and must obtain the signature of the relief client for charges made." Itemization of each individual call on Township P. R. Form 4, Report Medical Aid, will take the place of the required itemization on the back of the purchase order.

The claim with the original purchase order and report blanks attached is then filed with the township trustee who audits it and certifies it to the county auditor.

The trustee is required by law to see that the claim is correct in every respect, that the prices charged are not excessive, that the services were duly authorized, that all necessary signatures have been obtained, and that the reports of medical services rendered and the claim blank are properly and completely itemized. The county auditor is also required to verify that the claim is correct in every respect. The county auditor, under the law, is directed to pay poor relief claims monthly out of any township poor funds or funds from which advances may be made to the township.

County P. R. Form 7, Poor Relief Claim Blank, is a special claim blank to be used for all poor relief matters. It differs from the regular county claim blank. Physicians and surgeons should see that they present their claims on the proper blanks.

In Figure 2, illustration is made of the use of Township P. R. Form 4, Report on Medical Aid Rendered. Apparently at the time the doctor, John O. Johnson, made the house call on Nellie Burr, he did not have in his possession the purchase order. The call may have been authorized over the telephone with the understanding that the purchase order would be delivered later or there may have been some other reason for the doctor using the report on medical aid rendered.

Some doctors will prefer to use Township P. R. Form 4, Report on Medical Aid Rendered, in every case rather than use the back of the purchase order at any time. The reason for this preference is that the report on medical aid rendered is made out in triplicate. The doctor will use carbon paper in connection with this form. Because the form is made out in triplicate, one copy may be attached to the purchase order which is filed with the claim against the township; the second copy may be sent to the relief office; and the third copy may be retained by the physician for his files. Whenever payment is received by the doctor, he can check off the copy retained by him. The carbon copies will show the signature of the patient and full details of medical services rendered.

Purchase orders will be priced when issued by the relief officer in accordance with any township poor fee schedule in force by agreement or in accordance with the agreement between the overseer of the poor or the relief office and the doctor.

Too great care in authorizing medical aid is not possible under the law, but at no time is it desired that clients shall fail to receive *necessary* medical care as contemplated by the law.

When more than one service is rendered on the same purchase order, a separate Township P. R. Form 4 must be submitted for each service with signatures. A purchase order for medical aid must authorize all services for which a charge is made. If more service is rendered than is authorized on the purchase order, additional purchase orders must be obtained from the overseer of the poor providing he finds the charge is proper.

A purchase order for $2.50 can not support a claim for $12.50 even though evidence is filed showing that additional services were rendered. A purchase order for one house call can not support a claim for three house calls. Additional purchase orders must be obtained and submitted if the claim is proper. If the claim is improper, it will be reduced to the amount authorized and properly chargeable.

URGE USE OF P. R. FORM 4

We strongly recommend full and complete use of Township P. R. Form 4, Report on Medical Aid

Form Prescribed by State Board of Accounts

REPORT ON MEDICAL AID RENDERED

Township P. R. Form 4—1933

On Purchase Order No. 511 June 25 1935 West Township North County, Ind.

Name of Patient Nellie Burr Date of Service June 25 1935

Address 10 Black St Case Number 461

Diagnosis Tonsillitis

Office Call $

House Call $ 1.00

$

(Calls include all usual and ordinary medicines.)

Unusual Medicines, (itemize fully as to quantity, price, kind and necessity. Limited to U. S. P. and N. F.) $

Mileage miles (one way only outside city limits) $

Tooth extraction, child's Teeth $

Tooth extraction, adult's Teeth $

$

Hospitalization (itemize fully) $

Surgery (describe fully) $

Other Medical Services $

O. B. Case, including all prenatal and postnatal care $

TOTAL CHARGE $ 1.00

PATIENT'S RECEIPT

I have received in full the items and service listed above and authorized by this order.

Signed Nellie Burr
(Patient or head of household)

DOCTOR'S OR VENDOR'S STATEMENT

I have furnished the customer with the full amount of services, or other items listed above and authorized by this order

Signed John O. Johnson

(Front)

INSTRUCTIONS

Signature of patient or head of household must be obtained on properly itemized report blank on both emergency and other services rendered. All payments for emergency calls and tentative authorizations are contingent upon results of relief investigation by visitor.

This form to be made out in triplicate. Original submitted with purchase order and claim, duplicate sent to relief office, and triplicate to be retained by person rendering service.

Do not charge for any miles except those actually and necessarily traveled outside of the city limits for the purpose of the call. Calls to be grouped whenever possible in trips. Only one mileage charge allowed when more than one call made on same trip or in same household. Mileage one way only allowed.

When purchase order authorizes more than one call or service, separate report blanks must be submitted for each and every call and service rendered. This report can cover only one charge. Every charge must be specifically authorized by purchase order. Amount authorized by purchase order cannot be exceeded.

EMERGENCY SERVICE

"Generally a township is not under obligations to pay a claim for medical or surgical aid to the poor unless such services have been ordered or contracted for by the township trustee. However, in case of extreme emergency where delay for the purpose of communicating with the trustee might result in loss of life or other serious consequences to the patient, the physician or surgeon rendering the relief necessary would be entitled to payment therefor from the township poor fund without having been ordered by the trustee to perform such services. (See Newcomer v. Jefferson Twp. 181 Ind. 1.)" Legal Guide to Public Officials of Indiana, published by State Board of Accounts 1932.

It is contemplated by law that the overseer of the poor "***shall, in cases of necessity, promptly provide medical and surgical attendance for all of the poor in his township who are not provided for in public institutions***" Burns 1935, Supplement 52-148.

Required by Governor's Commission on Unemployment Relief

(Reverse)

200M—5-35

Form prescribed by State Board of Accounts

OVERSEER OF THE POOR

Township P.R. Form 2—1935

PURCHASE ORDER FOR MEDICAL AID

TRUSTEE'S OFFICE

Purchase Order No. 511

West Township, North County, Indiana. June 25 1935

TO Dr. John O. Johnson

PLEASE SUPPLY Nellie Burr Case No. 461

Address 10 Black St

WITH THE FOLLOWING SERVICES

Office Call $

House Call (one) $ 1.00

$

(Calls include all usual and ordinary medicines)

Unusual Medicines (itemize fully as to quantity, price, kind and necessity. Limited to U.S.P. and N.F.) $

Mileage, not over miles. $
(one way only outside city limits)

Tooth extraction, child's Teeth $

Tooth extraction, adult's Teeth $

$

Hospitalization (itemize fully) $

Surgery (describe fully) $

Other Medical Services $

O. B. Case, including all prenatal and postnatal care $

TOTAL AMOUNT OF THIS ORDER $ 1.00

Statement of patient as to illness Has fever and sore throat

Disbursing Clerk Fred Frame Authorized by Charles Cox Township Trustee

INSTRUCTIONS: This form to be made out in triplicate; original to doctor or vendor, duplicate filed alphabetically in relief office, triplicate remaining in book in numerical order. Use indelible pencil or ink. Do not use check marks. Write out number of services authorized in words (as "one").

Wherever possible, at the time the purchase order is written, the total amount of the order must be inserted in the space provided for the same.

Purchase orders are valid only for the month in which they are written. Thus, an order given on the 20th day of the month would be void after the last day of that month insofar as permitting the recipient thereafter to obtain relief. Obtain new purchase order from Trustee if necessary in order to carry out this requirement.

All poor relief claims rendered, etc., will be on a calendar month basis. Claims must be rendered on the basis of the last past calendar month and for no other period.

Doctors or vendors are required to return their copies of poor relief purchase orders at the time they file their monthly claims. Such monthly claims must show the purchase order number for each charge billed the Trustee's office. A separate claim must be filed for each township.

A report blank containing both the signature of the patient and the doctor or vendor must be submitted with the claim for each office call, house call or other service for which a charge is rendered. Any charge shall not exceed the amount prescribed in the fee schedule in force.

Required by Governor's Commission on Unemployment Relief,

200M—5-35

Twp. P. R. Form 4
Report on Medical Aid Rendered
Twp. P. R. Form 2
Purchase Order for Medical Aid

Fig. 2

Rendered. Every physician should have in his possession a supply of these forms which should be carried in his pocket or in his medical case. He should make out the report at the time the services are rendered and obtain required signatures. *It is believed that, once the system is fully understood and conscientiously followed by the physician, there will be very little difficulty.*

ITEMIZING SERVICES

In the past, the itemization of medical services rendered has been very loose and haphazard. There has been no real evidence of just what service was rendered. There have been instances in which complaints were made of excessive and improper charging which may or may not have been warranted. The profession itself should endeavor in every way to show that all items charged against the township have been duly authorized and the services actually rendered. The forms illustrated in Figure 1 and Figure 2 are intended to facilitate this work.

The instructions on the back of Township P. R. Form 4, Report on Medical Aid Rendered, should be read very carefully. They are shown in Figure 2. Special attention is called to the statement regarding emergency services which is as follows:

"Generally a township is not under obligations to pay a claim for medical or surgical aid to the poor unless such services have been ordered or contracted for by the township trustees. However, in case of extreme emergency where delay for the purpose of communicating with the trustee might result in loss of life or other serious consequences to the patient, the physician or surgeon rendering the relief necessary would be entitled to payment therefor from the township poor fund without having been ordered by the trustee to perform such services. (See Newcomer v. Jefferson Twp., 181 Ind. 1.")

Such services are only payable by the township providing the patient is qualified for relief under the law. Purchase orders for medical aid should not be issued by the overseer of the poor or the relief office for more than one service, i. e., house calls or office calls, unless there has been a diagnosis and a definite understanding as to how much additional service will be required. Generally a purchase order will authorize only one call. After a discussion and a diagnosis as to the needs of the case, further calls may be authorized by the proper authorities.

With regard to mileage, the State Board of Accounts form carries the following instructions: "Of course, no mileage will be charged where the fee includes this item." This will depend upon the system of township poor fee schedules in force in the particular locality.

CONTRACT PRACTICE

In certain townships of the state, the trustee has made a contract with a doctor or several doctors to furnish medical aid. Monthly compensation under this contract should be covered by a purchase order indicating the amount due, date of contract, and any other itemization. To conform to the rules of the State Board of Accounts, it will be necessary that this purchase order be supported by reports of medical aid rendered. Contract doctors will find Township P. R. Form 4 useful in carrying out this requirement.

Generally the Federal Emergency Relief Administration has favored the family-physician relationship over the contract doctor system, providing an agreement could be reached between the relief authorities and the medical society, and a reasonable fee schedule adopted. The overseer of the poor has employed a doctor on contract to take care of medical aid in the township in some cases where no agreement could be made.

REDUCTION IN CLAIMS

It is the duty of the trustee to reduce claims where charges are excessive or where an error in extension has been made. The township trustee in this case must exercise the same power formerly exercised by the board of county commissioners. The responsibility rests directly upon the township trustee. A system of agreeing definitely upon the charge to be made at the time authorization is given will eliminate the necessity of such deductions.

The giving of blanket authorization or "blank checks" for poor relief or medical aid is not permitted under the law. The issuance of a poor relief order is in effect the spending of public money.

SPECIAL CASES

In Figure 3 are shown a medical referral blank and an affidavit of emergency. The medical referral blank is used in special cases, new cases likely to require additional treatment, questionable or borderline cases, expensive cases, chronic cases, expensive minor surgical cases, and *all* major surgical cases.

On cases on which a medical order is granted where additional medical attention is likely to be required, this form should accompany the first purchase order so that the information contained therein can be used in making the decision for granting additional purchase orders.

ADVISORY COMMITTEES

It is greatly desired that a rotating professional advisory committee be appointed in each county by the medical society where other than a contract doctor is used for medical aid. The professional advisory committee will make its recommendations on these referral blanks on all cases where the use of a referral blank is required or seems desirable. Where the referral blank is used, an actual examination of the patient by the doctor to whom the referral is made, is desired. An independent diagnosis is the objective and any conversations by telephone or discussions with the doctor on the cases

Form Approved by State Board of Accounts — Form GCUR 333

Medical Referral No. 105

Instructions to Doctor: This is not a purchase order and no charge is to be made for this service unless the referral blank is accompanied by purchase order. In all cases the blank, properly filled out in duplicate must be returned immediately to the relief office. Where a charge for this diagnosis or other service is involved, a township medical purchase order must be obtained prior to rendering the service unless an emergency as contemplated by law exists. Where further treatment is necessary, it will be required that this form be returned before purchase order will be issued.

OVERSEER OF THE POOR—TRUSTEE'S OFFICE

MEDICAL REFERRAL BLANK

(Further comments may be written on back provided reference is made in blanks below)

East Township, North County, Indiana June 10 1935

To Albert Sloane (Doctor) Whiteville (Address)

We are referring to you for diagnosis and recommendation of necessary medical services, relief client

Name Mary Jackson Case No. 201

Address Whiteville Patient complains of Pain in right side

DIAGNOSIS AND RECOMMENDATION OF DOCTOR
To Be Returned to the Relief Office Immediately

I, being a duly licensed physician under the laws of the State of Indiana, do certify that I have examined the above person and my findings are as follows:

Diagnosis appendicitis

Necessary Treatment Recommended operation

Probable Costs, under fee schedule in force $ 35.00

Do the conditions present cause acute suffering? yes Explain

Do they prevent the patient from working? Yes Explain dangerous to work

Do they immediately endanger life? Yes Explain

Do the conditions threaten some immediate permanent new handicap that is definitely preventable with the medical care recommended? Explain

Can the case be delayed without immediate danger to patient? Short time

If so, how long? not over 24 hours

Date June 10, 1935 Signed Albert Sloane (Doctor)

This referral is sent to you as: (check which) (1) Doctor designated by patient (2) Member of professional advisory committee (3) Independent diagnosis after diagnosis by another doctor. ✓ (4) Under contract

INSTRUCTIONS TO RELIEF OFFICE: This blank to be used in special cases, new cases likely to require additional treatment, questionable or borderline cases expensive cases, chronic cases, expensive minor surgical cases and all major surgical cases. Send original and duplicate to physician. When returned, attach original to purchase order, if any claim is filed, file duplicate in Client's Record, file triplicate numerically.

Reference Order No. 605 Dated June 11, 1935 Case No. 201

Required by Governor's Commission On Unemployment Relief — 100M—5-35

Form Approved by State Board of Accounts — Form GCUR 334

Affidavit Emergency No. 2

OVERSEER OF THE POOR—TRUSTEE'S OFFICE

(Further comments may be written on back providing reference is made in blanks below)

East Township, North County, Indiana

State of Indiana } SS:
County of North }

AFFIDAVIT OF *EMERGENCY* FOR *NECESSARY* MEDICAL SERVICES RENDERED WITHOUT AUTHORIZATION

I, being first duly sworn, depose and say that I am a duly licensed physician practicing under the laws of the State of Indiana, that I have furnished the necessary services described below without previous authorization, and that it was not possible for me to secure a purchase order prior to rendering the service without endangering the life of the patient or probably causing by the delay other immediate serious consequence to the patient.

Name of Patient Anna Jones Address Jonesville

Date Call Received June 9 1935 Time 9 P.M. Service Rendered June 9 1935 Time 9:30 P.M.

Place Service Rendered Residence Diagnosis Arm Fracture

Treatment Rendered fracture reduced

(Itemized statement of call on attached copy report blank Twp. P.R. 2)

Additional Treatment Recommended Normal after care

Probable Cost under fee schedule in force $ 15.00

How long can additional treatment be delayed without danger to patient? Cannot be delayed

EMERGENCY NATURE OF CASE

Did the conditions present cause acute suffering? Yes Explain pain from fracture

Would delay have resulted in loss of life or other serious consequences to the patient? Yes

Explain deformed arm

Did the condition prevent the patient from working? yes Explain arm cannot be used

Did the conditions threaten some immediate new handicap that was definitely preventable by the treatment furnished or recommended? Explain

Was effort made to contact trustee or relief office? Yes Explain Trustee not at home

Signed A. M. Witherspoon (Doctor) Address Jonesville

Seal of Notary Public or Trustee or other Officer Authorized to administer oath

Subscribed and sworn to before me this 10th day of June 1935

Ben Burnsides
Township Trustee ~~Notary Public~~

My Commission Expires 193

FOR USE OF TRUSTEE'S OFFICE ONLY

INSTRUCTIONS: Before purchase order is granted this form must be filled out. All copies are then retained in Trustee's office until claim is filed by doctor, at which time the notarized original must be attached to the purchase order in the claim filed by the doctor.

Purchase Order No. 415 dated June 10 193 5 Case No. A-4120

Hold original and attach to claim when filed. (Original only notarized). File duplicate in Client's Record in Relief Office. File triplicate in book numerically.

Required by Governor's Commission on Unemployment Relief — 100M—5-35

GCUR Form 333
Medical Referral Blank
GCUR Form 334
Affidavit of Emergency for
Necessary Medical Services
Rendered without Authorization

Fig. 3

are to be supplemented by personal examination and an independent decision.

In cases where one doctor has made a diagnosis and it is desired that this diagnosis be confirmed by one or more additional doctors, the referral blank may be used in obtaining the independent diagnosis. This will apply especially in those counties where there is no professional advisory committee appointed for such services by the medical association. Referral should be made in all cases involving large expenditures of public funds, as a protection to the trustees and the doctor.

The other form is the affidavit of emergency for necessary medical services rendered without authorization. Whenever a doctor or vendor requests a purchase order for medical services rendered without previous authorization, the affidavit of emergency may be required by the relief office or the township trustee. The use of this form has been approved by the State Board of Accounts. Where verbal authorization by the trustee or relief office has been given, the form may be used before issuing written township medical aid purchase order if desirable.

This form will be used where a contingent or tentative authorization has been given to the doctor without actual issuance of the relief order. The proper control of medical aid requires that there shall be *prior authorization* of medical aid granted. The giving of purchase orders for services rendered without authorization shall be limited to emergency cases. The form is designed to determine the emergency nature of the case.

AID FOR INDIGENT ONLY

In no case are purchase orders to be issued for medical aid unless the client is entitled to relief. Contingent authorization may be made subject to relief investigation. If the client is found to be entitled to relief, a purchase order will then be issued for necessary medical aid rendered.

EMERGENCY SERVICE

Whenever a physician renders emergency medical aid services for which he expects to charge the township trustee, it is necessary that he fill out Township P. R. Form 4, Report on Medical Aid Rendered, and obtain the patient's receipt at the time he renders the emergency service. It will then be necessary that he request a purchase order from the trustee or relief office. The township trustee or the relief office *may* require in *every* instance the filling out of the "Affidavit of Emergency for Necessary Medical Services Rendered Without Authorization" and *should* always require the filling out of such affidavit where the charge is $1.50 or more. The form may be notarized before the township trustee or any notary public.

It is pointed out to the medical profession that the use of these forms will give some protection to the profession where the criticism is made that medical aid is given needlessly. Business methods in the authorization of medical aid are necessary, *but care is to be taken by all concerned that needed medical aid is given as contemplated by the law to indigent persons.*

FEES

The question as to the amounts to be charged to the township for medical aid rendered to poor persons is one that has caused considerable discussion. It is recognized that the compensation paid will not be the full measure of the value of the services rendered except where excessive township poor fee schedules are in force. The payment made should only be a "stop loss" to the doctor to help defray his actual cost in the matter, and preserve to him his regular patients until such time as the present unemployment emergency is passed. Usually there are no credit losses on the charges made to the township. For this reason, any fee schedule in force should be less than the ordinary and usual charge made to paying patients of the small wage carner class.

If medical costs are not kept to an economical and reasonable figure, the pressure of taxpayers against the overseer of the poor will compel him to employ doctors on a contract basis even though the service rendered may not be best for the patient. The medical profession complains frequently that it is taking care of poor persons for nothing because the patients refuse to go to the contract doctor. The problem is one very difficult of solution. The best solution is one which gives necessary medical aid to poor persons on an adequate basis at the lowest possible cost to the township.

COUNTY SECRETARIES HAVE MANUAL OF POLICIES

A copy of Chapter IV of the Manual of Policies and Procedure of the Governor's Commission on Unemployment Relief has been mailed to the secretaries of the various county medical societies. This chapter of the manual includes all outdoor poor relief laws, regulations and procedures prescribed by the State Board of Accounts, illustrations of the use of the various forms, and considerable other information regarding the supplying of relief and medical aid to poor persons. Further information may be obtained from this manual.

AVOID MISUNDERSTANDINGS

It is felt that there is considerable misunderstanding of the procedure and that most of the present criticism is based upon misunderstandings. As soon as these have been cleared up, both doctors and trustees should find that there is little difficulty in using the medical aid forms and procedure.

ARE YOU COMING TO GARY?

The Lake County Medical Society will be the host for the eighty-seventh session of the Indiana State Medical Association, to be held at Gary, October 8, 9, and 10, with headquarters at the Hotel Gary.

Plans already are in the making for this annual event, and while the Gary session of 1928 was generally considered a top-notcher, the local society promises to out-do the former effort.

Gary, located directly on the "sun-kissed, azure-blue waters of Lake Michigan," is at her best in early October. Her proximity to Indiana State Dunes Park affords an additional interest for nature lovers, since the Dunes are in their chief glory at that time.



Gary Hotel—Headquarters

Accommodations are available for all who come; the full list of hotels will be published in the September JOURNAL. All major highway projects of the region will have been completed before the meeting, which assures motorists full use of the best highways in the country. The scientific section is well under way, we are advised, and a preview of the program assures the membership that it will be of the very best. The scientific exhibit, as usual, will be an important part of the general program and the chairman of that committee advises that all is set for the best exhibit of this sort in the history of the Association.

ENTERTAINMENT

As for the entertainment features, well, the Lake County-ites are now famous for their hospitality, and on this occasion seem destined to uphold their previous reputations. The ladies are especially invited. Though they came in large numbers seven years ago, and all professed to have had a most enjoyable visit, arrangements have been made that promise a full occupation of the time our womenfolk spend in Gary.

The annual dinner, to be held on Wednesday evening at the Hotel Gary, will be in tune with those held during the past few years, which means a most enjoyable evening for all.

The mayor of Gary, together with his official family, already is evincing a hearty interest in our meeting, and promises not only the key to the city for all, but that official Gary will do her best to make pleasant a visit at this time. As usual, "Cap" Norton, perennial president of the Gary Commercial Club, announces that every registrant at this meeting automatically becomes a member of the Club, whose spacious rooms are in the Gary Hotel building.

The trip through the steel mills, an outstanding feature of the 1928 meeting, will be repeated and, even though you made this trip at that time, a second visit will be of equal interest from the fact that such changes have been made in the steel industry as to make it appear as a new plant.

Gary and the Lake County Medical Society await your coming; the city and all therein will be yours for the asking; your entertainment is assured; the scientific phases of the program are to be eminently worth while.

•

GET SET FOR GARY

IN OCTOBER!

MEETING TODAY'S CHALLENGE

BY L. B. McCRACKEN, MANAGER, MEDICAL AND DENTAL BUSINESS BUREAU OF INDIANAPOLIS

(This is the third of a series of four articles concerning a plan for medical service adopted by the Indianapolis Medical Society.)

The Medical Service Plan was unanimously adopted by the Indianapolis Medical Society at a regular meeting in May, 1934, following its recommendation by the Committee on Medical Economics.

The specific purpose of this plan was to balance medical cost with income for the industrial employee, and in fact for any individual who claims to be self-supporting yet unable to pay for medical treatment in a lump sum. All business details were to be handled through the bureau.

After the adoption of the plan and the co-operation of certain hospitals was assured, the next problem confronting the bureau management was how properly to place the advantage of this progressive movement before those entitled to its use. The air was full of plans, cure-alls, codes, bureaus, alphabetical concoctions, and various brilliant panaceas. Any proposal at this time had to be sound, sensible, and withstand the closest scrutiny. However, with the prestige of the entire membership of the Indianapolis Medical Society as a background, and the realization of the constructiveness of the program in hand, the plan was given immediate endorsement, approval and co-operation beyond expectation.

First, the editors of three Indianapolis daily papers were personally interviewed, the plan explained, and a copy of the outline left with them. On May 23, 1934, all three papers carried lengthy articles in their news columns and two ran editorials in addition. The Chamber of Commerce ran a special bulletin calling the attention of industries to the benefits for their employees, and in a personal letter from the General Manager to the bureau, he stated, "One of the most constructive ideas that I have heard in a long time is the plan whereby medical services may be obtained and paid for in keeping with the salaries and wages of the persons requiring such treatments. . . . I believe it is a great contribution by this important and vital profession that will leave its effect most favorably received upon many of the citizens of this city. . . . Please accept my sincere congratulations on the start of this plan and my best wishes for its full success. . . ."

Following this publicity, about thirty of our larger industries were contacted and the plan explained to their personnel managers. We asked their co-operation with the Indianapolis Medical Society through the bureau on the following points:

1. To acquaint their employees with the fact that complete medical service is available from the physician of their choice (providing he is a member of his Society) and on terms commensurate with their income and ability to pay;

2. To give the bureau upon request any information desired regarding an employee;

3. To render such aid as may be expedient and helpful to the bureau and employee in the systematic collection of payments;

4. To substantiate the foregoing co-operation by a personal letter to the bureau.

Letters arrived—from the utilities, hosiery mills, packing companies, foundries, manufacturers, railways. Interest and co-operation was assured. Favorable publicity at once placed the entire Society on a higher elevation of public interest and respect. Additional industries and firms have been contacted during the past year and the class most needful of this service is gradually becoming acquainted with its offer.

During the first month in operation, June 1934, six cases totaling $405 were referred to the bureau for credit investigation and payment arrangement. The first completed case was for an operation on the wife of an employee of a power and light company. Investigation disclosed that he was a steady, industrious worker, having been with the company nine years. He made $24 per week, had no dependents except his wife, was out of debt, had ordinary living expenses but no cash assets. The total cost for the service needed including the hospital was $222.98. An agreement was signed to pay $5.00 each week at the bureau offices. The first payment was made July 2, 1934. Every payment was made exactly as agreed and the final payment of $2.98 was made May 4, 1935. Each month the bureau pro-rated to the physician and hospital the sum paid in, less ten per cent, which the bureau retained as operating expense.

On May 13, 1935, the bureau received the following unsolicited letter from this individual: "Quite by chance, through a friend, I learned of your bureau at a time when it seemed necessary for me to borrow enough money to send my wife to the hospital. It is difficult to put into mere words the appreciation I feel towards your company for this favor. It is also comforting to know that such a company as yours exists, to help people who need it and are able to pay a certain amount but unfortunately do not have such a sum of cash on hand. As I know I was one of the first to be favored by you, I want to wish you success and hope that your future clients appreciate your service as much as I did."

Cases similar to this have been duplicated several hundred times during the past year. In June of this year, sixty-seven cases were interviewed. Of this number fifty-five were passed upon

(Continued on page 415)



INDIANA MEDICINE IN RETROSPECT



L. G. ZERFAS, M. D.
Historian, Indiana State Medical Association

INFLUENCE OF TRANSYLVANIA UNIVERSITY

WILLIAM NELSON DUZAN, Indianapolis

Dr. William Nelson Duzan, son of William and Jane (Nelson) Duzan, was born November 8, 1806. He studied medicine under Dr. Cunningham, of Jonesboro, Tennessee, from whom he received a diploma and a certificate of good character in 1832.[1] In the same year, and possibly before, he attended Transylvania University Medical College, at Lexington, Kentucky.[2] The lecture notebook, which he kept during his days as a student, is very interesting in the light of the advance in medicine and treatment of disease.



William Nelson Duzan, M. D.

Late in 1832 the Duzan family, including Dr. William Nelson Duzan and his two brothers, George Wesley Duzan, and John Duzan, came to Indiana and settled in Boone county.[3] In 1834 Dr. Duzan offered "his professional services to the citizens of Indianapolis and vicinity."[4] His first office was located on Washington street, a few doors west of where the postoffice then stood.

In 1847 Dr. Duzan was graduated from Transylvania University. His thesis was entitled "The Practice of Medicine."[2] Later Dr. Duzan's wide experience and extensive practice was in Boone and Hamilton counties.[5] In 1862 he returned to Indianapolis where he lived until 1872, when he retired from active practice. Dr. Duzan died August 12, 1886.

[1] Records obtained from Misses Jessie and Grace Duzan, Indianapolis, daughters of Dr. W. N. Duzan.

[2] From the register of the Transylvania University Library, through the courtesy of Mrs. Charles F. Norton, librarian.

[3] R. French Stone. Biography of Eminent American Physicians and Surgeons. Carlon & Hollenbeck, Indianapolis, 1894, p. 608.

[4] *Indiana Journal*, Indianapolis, Indiana, July 12, 1834.

[5] A Biographical History of Eminent and Self-Made Men of the State of Indiana. Western Biographical Publishing Company, 1880. Vol. 2, District 9, p. 9.

GEORGE WESLEY DUZAN, Augusta, Indiana

Dr. George Wesley Duzan was born January 7, 1813, and died April 2, 1880.[1] He graduated from Translyvania University Medical College in 1848, writing his thesis on the subject, "Inflammation."[2] He practiced at Eagle Village, Hamilton County, Indiana, and later near Augusta, Indiana.

[1] Records obtained from Misses Jessie and Grace Duzan, Indianapolis, daughters of Dr. W. N. Duzan.

[2] From the register of the Transylvania University library.

SAMUEL REID, Washington County, Indiana

Dr. Samuel Reid was born January 19, 1804, in Chester County, South Carolina, the son of Isaiah and Mary Clyde Reid. The Reids were of Scotch Irish ancestry, having emigrated from Belfast, Ireland, to South Carolina. The family removed from South Carolina to Clark County, Indiana, near Charlestown, in 1815. Two years later they settled in Washington County in the Walnut Ridge neighborhood.[1] Isaiah Reid was one of the first, if not the first school teacher in Washington County.[2]

Samuel attended Transylvania University Medical School for his first course of lectures in 1834. His preceptors listed that year were Dr. Robert C. Newlin and Dr. William A. Bowles, of Salem, Indiana. He graduated in March, 1835. The title of his graduating thesis was "Milk Sickness." The etiology of this malady was unknown at that time, and Samuel Reid presented some interesting observations in his thesis. In the opening paragraph he has these remarks to make:

"There are perhaps no facts more fully established than that the larger portion of the human family are averse to think for themselves; both to give a thorough investigation to the ideas they receive from others and equally tenacious of them when received." In his consideration of the etiology of milk sickness he lists mushroom vegetables, plants, mineral waters, and decaying animal

[1] Lawrence W. Paynter. Medical History of Washington County with Some Personal Recollections, 1931, p. 36.

[2] Warder Stevens. Centennial History of Washington County, Indiana, 1916, p. 708. B. F. Bowen & Co., Indianapolis, Ind.

matter as possible poisonous agents. He described an experiment carried out in Edwardsville, Illinois. A case of milk sickness developed in the family of Judge Smith following the eating of meat obtained from a cow which had died while being driven through the country. The meat was obtained and consumed immediately after the death of the cow. The members of the family taken sick were pronounced by Dr. Todd as suffering from milk sickness. Some of the meat removed from the cow was given to two dogs; both died the following day.[3]

Dr. Reid began practice in Salem in 1830, and continued in practice until 1863 when he removed to New Albany, Indiana. He moved back to Salem, where he died at the Robert Morris home on October 16, 1872.[4] He was married to Harriet Peck in 1842.

Dr. Lawrence W. Paynter states that "Dr. Reid was one of the real pioneer physicians of the county (Washington), a learned man, and an exceptionally able physician and skillful surgeon. He enjoyed a state-wide reputation."[4] He was one of the founders of the Washington County Medical Society and was its first president, 1852, its treasurer in 1856, and again served in the capacity of president in 1857.

During the Civil War he was a surgeon in Hospital No. 11. In 1841 he was preceptor of Samuel A. Rariden, Lee Hazelwood and Harvey D. Henderson, all of Salem, Indiana. In 1843 he was preceptor of F. Crumbaugh, of Madison, Indiana. These students all attended medical lectures at Transylvania University Medical School.[5]

STUART SCOTT COFFMAN, Sullivan, Indiana

Dr. Stuart Scott Coffman,[1] son of Abram and Jane Spear Coffman, was born at Zanesville, Ohio, on March 12, 1828. His parents moved to Louisville, Kentucky, and later to Greenville, Floyd County, Indiana, while Dr. Coffman was yet a boy.

He was educated in the Greenville, Indiana, Seminary. When twenty-one years of age he began the study of medicine under Dr. J. W. Porter of Greenville. In 1850 he entered the office of Drs. Girdner and Link, where he studied for two years except for the time he was in medical school. He attended the Kentucky School of Medicine, Louisville, Kentucky, during the year 1851-52. Following its close on March 1, 1852, he entered the Transylvania University Medical College, from which he graduated on July 15, 1852. The title of his thesis was "Typhoid Fever."[3]

Dr. Coffman began the practice of medicine at Orleans, Indiana, in March, 1853, where he continued until December, 1859, when he removed to Sullivan, Indiana. Here in 1860 he purchased the drug store of Dr. Worley S. Patterson. Dr. Coffman was very active in business and in politics, serving for ten consecutive years as chairman of the Democratic County Central Committee. He served one term on the Sullivan Town Board and was twice county representative in the state legislature, in 1873 and in 1877.



Stuart Scott Coffman, M. D.

Dr. Coffman was married August 26, 1852, to Miss Philena S. Rodman, of Salem, Indiana, and to them were born seven children, only one of whom, Miss Ella Coffman, survives at this date.

The Doctor was interested in race horses, and for many years maintained the Coffman Fair Ground on his property east of the town. Dr. Coffman was the defendant in the first malpractice suit in Sullivan county. He died in Sullivan on November 15, 1903.

[1] From the unpublished manuscript of Dr. James B. Maple's History of Medicine in Sullivan County, Indiana.

[2] From the register of the Transylvania University library.

[3] From the register of the Transylvania University library.

[4] Lawrence W. Paynter. Medical History of Washington County with Some Personal Recollections, 1931, p. 36.

[5] From the register of the Transylvania University library.

ACKNOWLEDGMENTS FROM STATE HISTORIAN

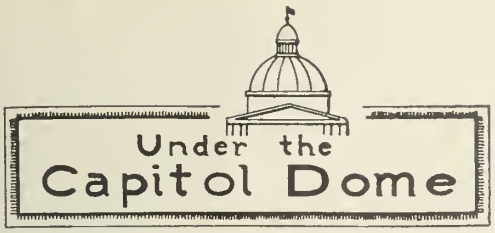
Dr. G. H. Kamman of Seymour, Indiana, has sent to this office a history of the Jackson County Medical Society from its organization in 1876 to the present.

Dr. E. M. Shanklin of Hammond, Indiana, has sent in a list of the charter members of the Lake County Medical Society, which was organized in 1898 by Dr. William F. Howat.

Dr. M. A. Austin, Anderson, has loaned the State Historian his "Personal Scrap Book," which contains minutes of the meetings of the Madison County Medical Society, photographs, obituaries and articles on the history of medicine in the county, as well as a history of the local society.

Dr. Ray M. Borland, Bloomington, has loaned the historian a copy of "The Indian Physician," written by Dr. Jonas Rishel and printed by Joseph Miller, of New Berlin, Pennsylvania, in 1828. He has also loaned two letters written by John Bowland to D. R. Dunihue, Esq., of Bedford, dated August 11 and September 25, 1833, describing the cholera epidemic in Monroe and Lawrence counties.

Dr. Alva L. Spinning, secretary of the Fountain and Warren County Medical Society, has loaned a copy of the paper, "Pioneer Physicians of Fountain County," which was read before the Fountain County Historical Society in 19332.



Offices of the state board of medical examination and registration will be closed from August 2 to 17. Emergency business with the board can be transacted through Dr. William R. Davidson of Evansville, secretary.

A total of 136 candidates took the state medical board's regular examination, which was conducted in the Claypool Hotel June 25 to 27. Certificates will be issued to successful candidates approximately September 1, Miss Ruth V. Kirk, secretary of the board, announced. Names of those receiving certificates will be announced at that time.

Six Illinois doctors have been granted licenses to practice in Indiana following their successful passing of a clinical examination conducted by the State Board of Medical Examination and Registration at the Indiana University Hospitals July 10. They are: Drs. John A. Melyn, who will practice at Whiting; Robert A. Nason, who will open an office at Garrett; Russell A. Winters, who will practice at Fort Wayne; Raymond F. Carmody, who will practice at Gary; Charles A. Gutzmer, who also will practice at Gary, and M. A. Spalding, who has not announced where he will practice in Indiana.

The medical board also granted a license to Dr. Frank J. Carlo through reciprocity with the state of Maryland. He will locate at Elkhart.

LICENSES REVOKED

Licenses of three physicians were revoked by the State Board of Medical Examination and Registration at a meeting July 9. The license of Dr. Benjamin F. Patton of Terre Haute was revoked as the result of his conviction on a charge of violating the Harrison narcotic act. Another whose license was revoked was Dr. Fred J. Freshley of Plainville who was convicted in the county courts on a charge of auto banditry. The third was Dr. Hugh S. Detchon who was licensed in Indiana but was practicing in Iowa. His license was revoked because he was convicted in the Iowa courts on a charge of performing a criminal operation.

The medical board refused to reinstate Dr. Ralph K. Brown of New Albany, whose license had been revoked October 10, 1934, as the result of a charge of violating the Harrison narcotic act.

INSULIN FOR THE INDIGENT

Dr. Verne K. Harvey made the following inquiry of Attorney General Philip Lutz, Jr.: "Is the State Division of Public Health required, under Chapter 83, of the Acts of 1935, to supply uniform printed blanks to health officers and trustees for the purpose of obtaining insulin for persons financially unable to purchase such insulin?"

Attorney General Lutz replied: "The State Division of Public Health is required under Chapter 83 of the Acts of 1935 to supply uniform printed blanks for the purpose of obtaining insulin for persons financially unable to purchase the same, said blanks to be furnished to all county health officers, etc., *in the manner as set out in Chapter 163, Acts of 1901.*

"The fact that Chapter 163 of the Acts of 1901 of the legislature concerns diseases of a public health nature does not of itself change the intent of the legislature on that particular point. The legislature deemed it wise to furnish insulin for the poor. It designated the manner of procedure to obtain the same; that is, it specified that insulin should be procured *in the same manner* that antitoxin, etc., was procured as set out in the Acts of the Legislature of 1901, Chapter 163 thereof."

INTERNAL REVENUE COLLECTIONS REACH PEAK IN INDIANA

Internal revenue collections from all sources in the State of Indiana for the twelve month period from July 1, 1934, to June 30, 1935, were $64,113,352.05, as against $32,655,605.80 for the fiscal year ended June 30, 1934. The principal details of the total collections as given by Will H. Smith, collector of internal revenues for the District of Indiana, are as follows:

	Year Ending June 30, 1934	Year Ending June 30, 1935
Income	$ 8,916,842.17	$13,863,567.35
Distilled spirits	6,647,424.10	22,855,488.29
Beer	3,546,966.27	7,231,949.45
Miscellaneous	7,815,460.19	10,054,419.85
Processing	5,728,913.07	10,107,927.11
Total	$32,655,605.80	$64,113,352.05

The collections on distilled spirits include the tax of $2.00 per gallon and special tax paid by retailers, wholesalers, and rectifiers. Collections on beer include the stamp tax of $5.00 per barrel and special tax paid by retailers, wholesalers, and brewers. The miscellaneous taxes include taxes on admissions and dues, oleomargarine, manufacturers' excise tax, and other miscellaneous taxes. Processing taxes are collected on pork, cotton, wheat, corn and tobacco.

The total collections as above set forth for the fiscal year represent the "peak" year over the preceding ten years.

MEDICO-LEGAL DEPARTMENT

By ALBERT STUMP
Attorney for the Indiana State Medical Association

Questions received from the Hamilton County Medical Society in reference to forms A, B, and C, regarding medical service in poor relief work, may be of interest to other physicians in Indiana, and are published together with Mr. Stump's answers.

Question 1. In a county not receiving FERA medical assistance in relief cases, and in which medical poor relief is paid for out of township poor funds, and whose township trustees are satisfied with the present method (form C) of submitting poor relief medical claims, who demands the completion of forms A and B, and under what authority can they enforce the filing of claims on these (A and B) forms?

Answer: The trustee as overseer of the poor is required to keep such records of the business of his office as may be prescribed by lawful authority. The act under which the State Board of Accounts was created, which is found in Burns 1933, Section 60-201, gives to the State Board of Accounts the power and duty to prepare blanks and forms for reports in installing a uniform system of accounting and reporting. This uniform system of accounting and reporting may be adapted through the forms made by the State Board of Accounts to collecting data on all types of public problems. When a system of accounting and reporting is adopted by the State Board and prescribed for the use of the various officials of the state, local or otherwise, it then becomes the duty of such officials to keep their records and make their reports in compliance with such forms. The State Board of Accounts can enforce compliance with these requirements through refusing to give to the official approval of his books and records, which if withheld would make it impossible for the official to have his public accounts properly cleared.

Question 2: Under what authority can any one demand (Form B) that the diagnosis of a pauper's physical or mental ailments be made a matter of public record simply because of his pauperism?

Answer: While there is no definite authorization in any statute to make public the facts of one's physical or mental disorders and diseases, yet to require a report covering those facts does not violate any existing statute. There is a generally recognized ethical consideration in the physician keeping entirely confidential the information which he receives as a physician from his patient. That ethical standard is protected by statute only to the extent that the physician cannot be compelled to testify as a witness concerning such information unless the privilege of keeping confidential the information is waived by the patient or someone who has the right under the law to speak for the patient. The confidential relationships between physician and patient have not been permitted to interfere with the enforcement of those rules and regulations lawfully adopted concerning the reporting to the Board of Health of various diseases.

All rules and regulations adopted by the State Board of Accounts governing reporting and accounting in the transaction of public business would be enforced by the courts unless such rules were found by the courts to be unreasonable. In view of the things that have been done in requiring the reporting of various diseases and have been upheld by the courts, we do not believe that the courts would set aside that feature of form B which requires that the physician who is to be paid from public funds make the report as to the diagnosis.

Question 3: By whom and under what authority are physicians, in treating paupers, limited to medicinals of the U.S.P. and N.F.?

Answer: The transaction of the public business by the trustee as the overseer of the poor must be done within those reasonable limitations and restrictions which would assure complete fidelity to the public interest. The State Board of Accounts again has certain discretionary power in fixing rules and regulations governing the transaction of public business to which they will give their approval. Now if they announce in advance that certain types of purchases will meet their approval, of course, the official who makes such purchases does so in the confidence that they will not later be challenged by the State Board of Accounts. If he upon his own initiative makes some contract which they announced in advance would not meet their approval, he then might have the necessity of either making good individually the funds expended in the contracts in the purchase or otherwise, or of litigating the question as to whether the expenditures were proper. Naturally, the trustee would not want to put himself in jeopardy through making purchases which he has been advised in advance would be condemned by the officials who inspect and may approve or disapprove his acts.

The forms as a whole may demand more than they should and yet they would be tested by the law under which the forms may be prescribed and by the law governing the obligation of the trustee. The trustee has no obligation to pay except where an emergency exists, unless he has made the promise or order for the services in advance. A reasonable provision may be made by the State Board of Accounts to preserve a record of such order or request from the trustee for the services involved. The State Board of Accounts may likewise make a reasonable provision for the furnishing of proof in some record form that the services were rendered. These powers on the part of the state exist whether the township is paying its own poor relief bills or is obtaining assistance through the FERA. The FERA, of course, may make addi-

(Continued on page 415)

DIPHTHERIA REPORT FOR JUNE, 1935

Seven deaths for the month of June is a very discouraging report. This brings the total for the first half of the year to forty-five, which is exactly the same as last year. To be sure, last year was the lowest in the history of Indiana, but we had ardently hoped that we would do much better this year.

The age of the patients gives some encouragement, however, inasmuch as they are mostly not in the group that was immunized extensively a year or so ago. The ages are as follows: one and one-half months, two years, five years, two years, six years, and fifteen years. All but one out of the seven emphasize the need of immunization of the pre-school child.

Allen County had three deaths during the month of June, bringing its total up to seven for the year; and Marion County had two deaths during June, bringing its total up to fourteen. All counties with deaths this month were already in the black list for the year. Epidemic centers seem to be Allen, Boone, Marion and St. Joseph counties.

Below will be found a list of the deaths by counties for the month of June and for the first half of the current year:

County	No. Deaths June, 1935	Total for 1935
Allen	3	7
Boone	1	2
Bartholomew	0	1
Crawford	0	1
Delaware	0	1
Elkhart	0	1
Grant	0	1
Fayette	0	1
Jackson	0	1
Lawrence	0	2
Lake	0	1
Laporte	0	1
Madison	0	1
Marion	2	14
St. Joseph	1	2
Spencer	0	1
Steuben	0	1
Tippecanoe	0	2
Vigo	0	1
Wayne	0	1
Knox	0	1
Warrick	0	1
Total	7	45

THURMAN B. RICE, M. D., Chairman,
Diphtheria Prevention Committee.

SECRETARIES' COLUMN

July 12, 1935.

To: All County Society Secretaries
From: Chairman, Committee Secretaries' Conference
Subject: Social Security Act

Dear Doctor:

The Social Security Act has been passed by both Houses of Congress and is now being considered by a conference committee to iron out some snags before it is sent to the President for his consideration.

The Social Security Act embraces:

1. Unemployment insurance.
2. Old age pension.
3. Care of crippled children.
4. Maternal and infant welfare.
5. Public health (state and local).

We as doctors are only concerned with parts 3, 4, and 5.

In June 1935, the surgeon general of the United States Public Health Service, who will administer part 5, called a conference in Washington of all the state and territorial health officers and four representatives from the A. M. A. At this meeting health officers were defined and their qualifications to act as such were outlined, as also were nurses, sanitariums and sanitary engineers.

Eight million dollars annually is appropriated for the employing of full time city, county and district health officers for developing city, county and district health departments, and for the training of public health personnel.

There is also a tentative state plan outlined for the maternal and child health program.

Now, Doctor, all this is coming to your door before long. Look into it, study it, and talk it with the members of your society. If you want any more information, write to me, to headquarters office, or to Dr. W. W. Bauer of the A. M. A., and every help will be given you.

This is a large subject and should be given a large amount of thought.

And don't forget to make your reservations in Gary for the annual session of the State Association, October 8, 9, 10.

Sincerely yours,

Chairman.

DEATH NOTICES



GEORGE D. MILLER, M. D., prominent internist of Logansport, died July nineteenth following injuries received in an automobile accident. He was sixty-one years of age.

Dr. Miller was widely and favorably known by members of the Indiana State Medical Association in which he was an active worker. Since 1927 he has served as chairman of the credentials committee for the association, and his manner of calling the roll at the meetings of the House of Delegates will be remembered by all who have served in that body.

Dr. Miller was active in his local and district medical societies and was serving as councilor for the Eleventh District at the time of his death.

Interested in politics, Dr. Miller was state senator from Cass and Fulton counties, and had served in the 1933 and 1935 legislatures. He also had served as Cass County coroner from 1906 to 1910.

Dr. Miller graduated from the Central College of Physicians and Surgeons in 1901 and had practiced medicine in Logansport since that time.

During the last session of the legislature, Dr. Miller sponsored the state beauty culture regulation act, and was author of the law providing for appointment of part-time and full-time county and city health officers. He also was author of the act which authorizes counties, cities and towns to supply antitoxin and virus free for treatment of diphtheria, scarlet fever and tetanus, and he sponsored the repeal of the state hydrophobia fund law.

Dr. Miller will be sadly missed by his many friends in the councils of the Indiana State Medical Association which he served so loyally. He was a member of the Cass County Medical Society, the Indiana State Medical Association, and the American Medical Association.

A. C. KENNEDY, M. D., of Patricksburg, died June eleventh, aged sixty-one years. Dr. Kennedy had practiced in Patricksburg for thirty-six years. He was a graduate of the Medical College of Indiana, Indianapolis, in 1898, and was a member of the Owen County Medical Society, the Indiana State Medical Association, and the American Medical Association.

JOHN H. LEMON, M. D., one of Indiana's oldest physicians, died at his home in New Albany, July tenth, aged ninety years. Dr. Lemon served with the Union Army during the Civil War, and had practiced in New Albany since 1867.

SAMUEL O. BARWICK, M. D., of Elkhart, died July seventh, aged seventy-two years. Dr. Barwick graduated from the Eclectic Medical College of Cincinnati in 1894. He was a member of the Elkhart County Medical Society, the Indiana State Medical Association, and the American Medical Association.

JOSEPH W. SMADEL, prominent physician of Vincennes, died in a St. Louis Hospital, June thirtieth, aged sixty-four years. Dr. Smadel was a member of the Knox County Medical Society and of the Indiana State Medical Association, and was a Fellow of the American Medical Association. He graduated from the University of Louisville School of Medicine, Louisville, Kentucky, in 1896.

MILTON S. SMITH, M. D., ophthalmologist and otolaryngologist of LaPorte, died in a Chicago hospital, July third. Dr. Smith was seventy-three years of age. He graduated from the Chicago Homeopathic Medical College in 1896. Dr. Smith had been a member of the LaPorte County Medical Society, the Indiana State Medical Association, and the American Medical Association.

PAUL LEATHERS, M. D., of Indianapolis, died June twenty-first, aged forty-five years. Dr. Leathers graduated from the Indiana University School of Medicine, Indianapolis, in 1927.

EDWARD CLINE LIDIKAY, M. D., of Ladoga, died July eighteenth, aged fifty-eight years. Dr. Lidikay had practiced in Ladoga for thirty-two years. He was a member of the Montgomery County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association. He graduated from the Medical College of Indiana, Indianapolis, in 1903.

HOOSIER NOTES

DR. A. D. EREHART of Anderson and Miss Mary Herzog of Anderson were married July third.

DR. FRANK P. ALBERTSON has opened an office for the practice of medicine at Trafalgar.

DR. E. BRISCOE LETT has announced the opening of an office in Loogootee, where he will conduct a general practice.

DR. ROBERT W. OWSLEY has located in Thorntown, where he will be associated with his father, Dr. G. M. Owsley.

DR. RICHARD NORTON, who has been located at Battle Creek, Michigan, has joined the staff of the Warren Clinic at Michigan City.

DR. J. B. FATTIC of Anderson has sailed from New York with a party of six who will make an extensive trip through northern and central Africa.

THE sixty-fourth annual meeting of the American Public Health Association will be held in Milwaukee, October 7th to 10th.

DR. PERRY COTTON, son of the late Dr. C. C. Cotton of Elwood, has opened an office in Elwood for the practice of medicine.

DR. H. P. PARKER of Urbana has purchased a residence, which will be remodeled for use as a hospital and sanitarium.

DR. RUSSELL BASKETT of Jonesboro and Miss Edna Bundy of Spiceland were married June thirtieth in Spiceland.

DR. E. E. RICHARDS of Indianapolis has bought the Dr. D. E. Reed office in Russellville and has taken up his practice there.

DR. PAUL E. HALEY and Dr. Ladislaus Faltin of South Bend sailed July eighth on the S. S. Rex for Vienna, where they will do postgraduate work.

DR. FRED PERRY, son of Dr. I. E. Perry of North Manchester, has formed a partnership with Dr. L. M. Vore of Plymouth, where he will be located after August fifteenth.

DR. GEORGE S. MOORE of Hartford City has purchased a residence at 401 West Washington Street, which will be made into a modern office and residence, to be occupied about September first.

DR. ROBERT B. ACKER and his daughter, Gwenyth, have returned to South Bend after a four-month journey in Europe, where Dr. Acker did some postgraduate work.

DR. HUBERT WILSON of Twin Falls, Idaho, who practiced in Michigan City from 1892 to 1909, died June twenty-sixth. Dr. Wilson was a brother of Dr. L. A. Wilson of Michigan City.

DR. H. D. TRIPP of Kewanna has leased his office to Dr. Kenneth Kraning of North Manchester for a period during which Dr. Tripp will do postgraduate work in surgery, in which he will specialize.

R. B. WETHERILL, M. D., of Lafayette, has received the honorary degree of doctor of laws from Purdue University. The degree was conferred at the commencement exercises, June 11, 1935.

DR. W. U. KENNEDY of New Castle addressed the Rushville Kiwanis Club, June twenty-seventh, and presented his observations made on several tours to Europe, including comments on medical practice in some of the European nations.

DR. WILSON EIKENBERRY of Peru and Miss Everissa F. Waite of Peru were married June twenty-seventh. Dr. Eikenberry will be located at Ocean City, N. J., temporarily, and later expects to enter practice with his father, Dr. B. F. Eikenberry of Peru.

DR. WILLIAM EBERLE THOMPSON of Bethel, Ohio, celebrated his one hundredth birthday on July sixth. Dr. Thompson still is active, and the town

made a gala day of his birthday anniversary and his seventy-five years of practice. The Ohio State Medical Association sent its president to pay the respects of the profession.

THE eighth annual graduate fortnight of the New York Academy of Medicine will be held October 21 to November 2, 1935, with headquarters at the New York Academy of Medicine, 2 East 103d Street, New York. The subject will be "Diseases of the Respiratory Tract." Complete program is available. Registration fee is three dollars. All members of the medical profession are invited to attend.

THE Vanderburgh County Medical Society, at its June twenty-fifth meeting, passed a resolution favoring a full-time health officer for Evansville and Vanderburgh County. Under the provisions of the bill passed at the last state legislature, providing an optional plan for communities desiring it, the society declared itself in favor of a non-political, well-qualified physician to combine all city and county public health activities. A committee of three physicians from the society was appointed to work with lay groups in the community to effect the unification.

TRIBUTE to the memory of Dr. William J. Bauer, who was chief resident physician of the Indianapolis Methodist hospital at the time of his death in February, was paid July thirtieth when more than one hundred internes attended a dinner in the hospital, and a portrait of Dr. Bauer was unveiled. The portrait, with a bronze memorial tablet, will be placed in the resident physician's office. The portrait was the gift of the Medical Staff Society. The eighteen graduating internes were awarded their diplomas and the gold key of the hospital at this memorial meeting.

THE United States Civil Service Commission announces open competitive examination for maternal and child health specialists, applications for which positions must be on file not later than August 19, 1935. Employment will be in the Children's Bureau, Department of Labor. Optional subjects are: Pediatrics, obstetrics, orthopedics, and general (maternal and child health). Full information and application blanks may be obtained from the secretary of the United States Civil Service Board of Examiners at the post office or customhouse in any city which has a post office of the first or the second class, or from the United States Civil Service Commission, Washington, D. C.

THE Municipal Civil Service Commission of the City of New York has announced that in the near future an examination will be conducted for the position of Assistant Director of the Bacteriological Laboratories, Health Department. Application blanks may be obtained by writing to the Municipal Civil Service Commission, Application Bureau, Room 1403, Municipal Building, New York City. Applications must be filed in the office of the commission before September 3, 1935.

THE Indiana Section of the American Hospital Association at its July meeting, held in Indianapolis, divided the State of Indiana into four geographical sections, and all hospitals are automatically members of the group of a certain geographical location. All hospitals thus automatically are members of the Indiana Hospital Assembly and may send two official representatives to each council assembly. Others from the institutions may attend the called meetings and receive detailed information relative to hospital administration, legislation, rehabilitation, nursing requirements, and all departmental matters. In order to create interest in this arrangement, the various councils have been named according to the councils of the Indian tribes who were active in various sections in the early history of Indiana. A committee has been appointed for each section, Ottawa (northwest), Shawnee (southwest), Wyandotte (central), and Miami (northeast).

IN addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories
Abbott's Cod Liver Oil

Hynson, Westcott & Dunning
Surgical Solution of Mercurochrome—H. W. & D.

Lederle Laboratories, Inc.
House Dust (New York Apartment House) Allergenic Extract—Lederle

Merck & Co., Inc.
Aminoacetic Acid—Merck

Parke, Davis & Co.
Antipneumococcic Serum (Felton), Types I and II, Refined and Concentrated

E. R. Squibb & Sons
Soluble Gelatine Capsules, Squibb Stabilized Halibut Liver Oil
Soluble Gelatine Capsules, Squibb Stabilized Halibut Liver Oil with Viosterol

The following article has been accepted for inclusion in the List of Articles and Brands Accepted by the Council but Not Described in N. N. R. (New and Nonofficial Remedies, 1935, p. 445):

U. S. Standard Products Co.
Epinephrin Hydrochloride Solution 1:1000

INDIANA UNIVERSITY NEWS NOTES

Interneships in hospitals throughout America have been granted to members of this year's Indiana University School of Medicine graduating class. The complete list is as follows:

Indianapolis City Hospital: Neal E. Baxter, Bluffton; Lowell Beggs, Scottsburg; James S. Browning, Indianapolis; Samuel S. Caplin, Indianapolis; Vance J. Chattin, Bloomington; James Crawford, Indianapolis; Jack E. Dittmer, Kouts; Joseph Dudding, Hope; Richard E. Estlick, Columbia City; Adolph Goldstone, Gary; Clarence Hartley, Evansville; Clarence Haslinger, Indianapolis; Robert Hill, Bloomington; Francis P. Jones, Indianapolis; Philip L. Kurtz, Indianapolis; Paul Long, Anderson; James M. Leffel II, Warsaw; George Macy, Indianapolis; Lee Maris, Kingman; Noel D. Moran, Indianapolis; Harold Nisenbaum, Indianapolis; John P. Pennell, Kokomo; Arthur Rosenthal, East Chicago; Theodore V. Ross, Kokomo; Kenneth L. Shaffer, Corydon; Homer B. Shoup, Jr., Sharpsville; Lorin Slegelmilch, Wabash; Howard A. Stellner, South Bend; Wendell C. Stover, Linton; Donald E. Wood, Indianapolis.

Indiana University Hospitals (Indianapolis): James G. Bledsoe, Linton; Edward Boyer, Plymouth; C. Eugene Cook, North Manchester; Edward Efroymson, Indianapolis; Aubrey Elsten, Lapel; John E. Fisher, Worthington; Naomi D. Furnas, Indianapolis; William A. Gitlin, Bluffton; Thomas Jones, La Center, Ky.; Chang S. Kim, Chairyung, Korea; John Palm, Harmony; Gretchen Polhemus, Mitchell; Jacob Rosenwasser, Mishawaka; Wendell Shullenberger, Indianapolis; Albert E. Stouder, Andrews; Richard Stover, DeLand, Fla.

Methodist Hospital, Indianapolis: Stanton L. Bryan, Evansville; Robert W. Currie, Windfall; Chester Lamber, LaPorte; Glen W. Lee, Indianapolis; Durward Paris, Kokomo; Lewis Robbins, Indianapolis; Dan E. Talbott, Indianapolis; George W. Wagoner, Burrows; Joe G. S. Weber, Indianapolis.

St. Vincent's Hospital, Indianapolis: Joseph T. Farrell, Indianapolis; Albert Marshall, Jr., Indianapolis; John M. Michener, Indianapolis; Harold E. Miller, Seymour; Thomas A. Pierson, Newcastle; Ray Tharpe, Ladoga.

Epworth Hospital, South Bend: Ralph Arisman, Elkhart; Samuel E. Bechtold, South Bend; Vergil Miller, Rochester.

St. Joseph's Hospital, Fort Wayne: Robert Brosius, Fort Wayne; Edward McArdle, Fort Wayne.

McKeesport Hospital, McKeesport, Pa.: Mahlon F. Miller, Auburn; Douglas W. Price, Nappanee.

Fort Wayne Lutheran Hospital, Fort Wayne: Clarence Bosselmann, Fort Wayne.

Montreal General Hospital, Montreal, Quebec, Canada: Robert Butterfield, Muncie.

Santa Barbara Cottage Hospital, Santa Barbara, Calif.: Stuart R. Combs, Terre Haute.

Cleveland City Hospital, Cleveland, Ohio: Kermit Covell, Angola.

Deaconess Hospital, Evansville: Elvin Lee Fitzsimmons, Evansville.

City of Detroit Receiving Hospital, Detroit, Mich.: Paul Gray, Roanoke.

Good Samaritan Hospital, Cincinnati, Ohio: John Kenneth Jackson, Aurora.

New York City Hospital, New York City: Leo Kamman, Indianapolis.

U. S. Marine Hospital, Stapelton, N. Y.: William H. Kammerer, Logansport.

Ancker Hospital, St. Paul, Minn.: Ford Keppen, Michigan City.

Lella Y. Post Montgomery Hospital, Battle Creek, Mich.: Robert J. Kinzel, Indianapolis.

St. Joseph Hospital, South Bend: Joseph E. Lang, South Bend.

San Diego County General Hospital, San Diego, Calif.: John W. Little, Jr., Indianapolis.

Springfield City Hospital, Springfield, Ohio: R. Milton May, Laconia.

Deaconess Hospital, Cincinnati, Ohio: Warren Morris, Aurora.

St. Francis Hospital, Hammond: Walfred Nelson, Gary.

St. Margaret's Hospital, Hammond: William Newcomb, Hammond.

Waterbury Hospital, Waterbury, Conn.: Robert Orr, Dunkirk.

Barnert Memorial Hospital, Paterson, N. J.: Meyer Shipman, Paterson, N. J.

Henry Ford Hospital, Detroit, Mich.: Wilbur Shortridge, Medora.

Starling-Loving Hospital, Columbus, Ohio: Morris Stern, New York City.

St. Marys' Hospital, East St. Louis, Ill.: James Taylor, Villa Grove, Ill.

Asbury Hospital, Minneapolis, Minn.: Margaret Thoroman, Bedford.

St. Elizabeth's Hospital, Lafayette: Edward C. Voges, Terre Haute.

Sibley Memorial Hospital, Washington, D. C.: Roy Nicholson, North Manchester.

SOCIETIES AND INSTITUTIONS

COUNTY MEDICAL SOCIETY REPORTS

DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY members met at White Oaks Lodge on the estate of Dr. Will C. Moore near Yorktown, June nineteenth, for their annual social outing.

* * *

GIBSON COUNTY MEDICAL SOCIETY members and the Princeton Methodist Hospital staff members indefinitely postponed their meeting scheduled for July eighth, to be held at the New Harmony dam, because of high waters.

* * *

GRANT COUNTY MEDICAL SOCIETY held its regular monthly dinner meeting at the Hotel Spencer, Marion, June twenty-seventh.

* * *

HENDRICKS COUNTY MEDICAL SOCIETY held its June twenty-first meeting at Pittsboro, with Lebanon physicians invited to attend. A chicken dinner was served to the twenty-five attending physicians. Dr. John A. MacDonald of Indianapolis was the principal speaker, his subject being, "Gastric Ulcers."

* * *

INDIANAPOLIS MEDICAL SOCIETY held its eighth annual picnic at the Polk farm at Greenwood, June twenty-sixth, with two hundred members in attendance.

* * *

JAY COUNTY MEDICAL SOCIETY met at Portland, July fifth, with Dr. L. G. Montgomery of Muncie as principal speaker. Dr. Montgomery's subject was "Appendicitis." Dr. W. C. Moore of Muncie discussed the paper.

* * *

LAWRENCE COUNTY MEDICAL SOCIETY members held a business meeting at Bedford, July second.

* * *

MIAMI COUNTY MEDICAL SOCIETY members met at Peru, June twenty-sixth, to hear Dr. Q. U. Newell of St. Louis who presented a very interesting talk on cancer problems. Attendance was more than fifty.

* * *

MONTGOMERY COUNTY MEDICAL SOCIETY met at Culver Hospital, Crawfordsville, June twentieth, with Lieutenant-Colonel Wilson Von Kessler as principal speaker.

* * *

SULLIVAN COUNTY MEDICAL SOCIETY members were entertained at the country home of Mr. and Mrs. R. H. Crowder, June twenty-eighth.

* * *

WABASH COUNTY MEDICAL SOCIETY held a meeting at the Wabash County Hospital, July third. Members were dinner guests of Drs. L. B. Rhamy, L. E. Jewett, and Z. M. Beaman. Dr. Goethe Link of Indianapolis presented a paper on "Thyroid Glands."

* * *

WELLS COUNTY MEDICAL SOCIETY members met at the office of Dr. G. B. Morris in Bluffton, June twenty-fifth. Dr. A. N. Ferguson of Fort Wayne was the principal speaker.

* * *

WHITLEY COUNTY MEDICAL SOCIETY members were guests of Dr. and Mrs. E. V. Nolt of Columbia City at their log cabin near Crooked Lake, July ninth.

INDIANA STATE MEDICAL ASSOCIATION

BUREAU OF PUBLICITY

June 3, 1935.

Present: William N. Wishard, M. D., chairman; J. H. Stygall, M. D.; E. D. Clark, M. D., and T. A. Hendricks, executive secretary.

Minutes of the meeting of April 19 approved for signature.

Release, "Safe and Sane Swimming," approved for publication in June 10 papers.

The Bureau made the suggestion that a series of releases upon "Sinus Trouble" be prepared ready for publication early next winter.

Request for speaker:

June 5—Woman's Auxiliary to the Madison County Medical Society, Anderson. The Bureau suggested that the auxiliary promote a pilgrimage to the graves of the following four Indiana medical pioneers:

1. Mrs. Jane Todd Crawford who is buried near Sullivan, Indiana. In 1809 Doctor Ephriam McDowell performed the first operation in the world for ovarian tumor upon her. Kentucky recently dedicated a monument to Dr. McDowell for his work upon this occasion.

2. Jonathan Richmond, buried at Covington, Indiana, who did the first Caesarean section west of the Alleghany Mountains.

3. John Stowe Bobbs, buried at Crown Hill, Indianapolis, who performed the first gall stone operation in the world.

4. Mrs. Z. (Mary E.) Burnsworth, Doctor J. S. Bobbs' patient, who is buried at McCordsville, Indiana.

Speaker assigned by the Bureau to make this suggestion at this meeting.

Request received from Gibson County Medical Society for information in regard to a publicity campaign. This information was obtained for the Gibson County Society.

Letter received from the historian of the Association in regard to the history of the Aesculapian Society, "said to be the oldest medical society west of the Alleghenies that is still in existence."

BUREAU OF COMMUNICABLE DISEASES

MONTHLY REPORT, JUNE, 1935

Diseases	June 1935	May 1935	Apr. 1935	June 1933	June 1934
Tuberculosis	193	179	225	130	197
Chickenpox	89	375	497	192	80
Measles	343	1,019	1,819	587	2,083
Scarlet fever	232	451	724	214	233
Smallpox	4	3	9	8	6
Typhoid fever	10	14	2	69	34
Whooping cough	110	245	335	325	265
Diphtheria	51	66	75	52	40
Influenza	27	46	144	81	30
Pneumonia	68	90	124	19	18
Mumps	80	162	109	96	13
Poliomyelitis	2	0	1	3	1
Meningitis	11	13	24	10	3
Trachoma	1	0	0	0	0
Encephalitis	1	0	4	0	0
Paratyphoid fever	2	0	0	0	0
Undulant fever	2	5	0	2	3
Pellagra	1	0	0	0	0
Hydrophobia	1	0	0	0	0

MEDICAL COLLEGE OF INDIANA CLASS OF 1903, REUNION

The Class of 1903 of the Medical College of Indiana held its fourth reunion at Turkey Run on May 22, 1935. Of the 54 members of the class, 28 were in attendance and 19 more sent letters of regret. In addition there were several sons of the doctors who are either in medical school or expect to be.

One of the pleasing features of the occasion was the presence of 18 of the wives and daughters, and they enjoyed the meeting so well that it is possible that there may be an auxiliary formed for the celebrated Class of 1903.

The class challenges any other year's graduates to show a more loyal class spirit or warmer professional feeling.

Dr. E. D. Wagoner was at the time of the meeting a patient in the Methodist Hospital in Indianapolis and flowers and a word of cheer were sent to him.

Drs. A. B. Cray, E. D. Havens, F. C. Klein, and Mary T. Ritter were detained by reason of illness, and greetings were sent to them also.

The class expects to have another reunion in two years. Dr. F. S. Crockett was re-elected as president of the class, and Dr. Charles N. Combs was re-elected as secretary of the class.

REPORT ON SPECIAL CONFERENCE ON ECONOMICS, CHICAGO

The meeting convened promptly at 9:30 a. m. April 27, 1935, and lasted without interruption, save for dinner, until 5 p. m. Dr. R. G. Leland presided. Others present from the A. M. A. were Drs. Bierring, Fishbein, and West. The discussion was conducted by following a syllabus outline of all types of county society plans for indigent and low-income groups thus far proposed, supplemented by more detailed abstracts of plans in operation and a sort of catechism for use in preparing a medical society plan.

In the following outline the different headings are lettered and numbered to correspond to the syllabus used at the conference. Notes on the discussion are appended to the corresponding section of the outline.

A—Special Fee Schedule—

(for low-income groups and those temporarily unemployed.)

Discussion: St. Louis Plan—Practically the same as the FERA schedule, only for the period of emergency. In general: Objection to the special fee schedule: it is easy to start, but difficult to stop, and not desirable in any plan looking toward the future.

B—Indigent—

1. Contract or agreement with proper officials of the political sub-division.

a) Specified sum paid quarterly or annually.

Discussion: In Los Angeles County, Calif., the so-called "San Fernando Plan" operates primarily for doctors in outlying districts and amounts to about 50 cents per office call. Barton County, Kansas, had trouble distinguishing "work relief" from other indigent cases, so the amount of the specified sum recently was raised from $1,300 to $3,000 per month. Georgia—physicians of the state received monthly $40,000 to $50,000 up to July, 1933 (and over 90 per cent of this was Federal funds). Wisconsin—this plan is not feasible when relief rolls become swelled above normal. Blackhawk County, Iowa—had to abandon lump sum plan in 1932; now are on special fee schedule.

b) Special fee schedule.

Discussion: Oakland County, Mich.—The social service worker refers cases to the family doctor. Cost has averaged 5.2 per cent of total cost of relief. This includes all medical care except hospitalization (even drugs, crutches, eyeglasses, etc.). To date it has figured 49 cents per person per month. The money comes from state and federal governments. One of the main points of success is the avoidance of prying into medical conditions by social service workers. Instead of auditing bills, services are limited (e. g., chronic cases, one call per week), with a fee schedule of approximately 50 per cent of normal to go by as a guide. Experience in Oakland county has shown most physicians to be honorable in this work. (County seat, Pontiac.)

c) Per capita (based on periodic adjustment of indigent load).

Discussion: Cleveland, Ohio—applicants are given a card to take to their family physician, who may in turn refer the case to a dispensary if he wishes. Approximately 30 per cent of those given cards never report to the doctor, and 30 per cent are referred to dispensaries by the doctors. Ohio—the state administrator in answering a proposed "strike" by medical societies in three counties threatened to supply salaried government physicians. This situation is being ironed out.

2. Iowa—general report on plans for indigent:

Thirteen counties have lump sum contracts; fourteen are on a fee schedule, as arranged by the State Medical Association; seventeen are on a fee schedule arranged locally by the doctors; and nine are on a fee schedule agreed to by the supervisors. A physician, Dr. Denny, is in charge of medical relief in Iowa, which helps. Forty-three counties are bankrupt. The ERA plan was easy to adopt, but would it have been so were the medical relief administrator not an M. D.? Control of funds is the crux of the matter.

C—Minimum guarantee to physicians:

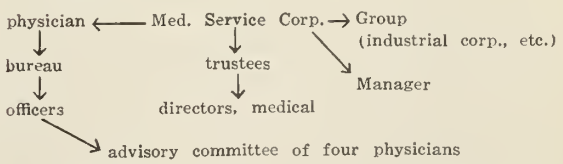
(In communities not otherwise able to secure resident physicians.)

Discussion: none.

D—Prepayment medical care—complete service. (Organized for industrial groups only for all persons below a stated annual income.)

1. Medical Service Bureaus.

Discussion: Washington—(Dr. Spickard) in explanation of the local situation which had developed over a long period, leading up to the formation of the county medical society's bureau: the Industrial Surgeons' Association, made up of contract holders, created much unfair competition and gradually eliminated the majority of physicians from this practice. This degenerated into a "supplemental contract" scheme which in turn caused the other physicians to buck the system. A few men had state-wide contracts and hired young men to do the work. The medical society changed its by-laws to read that no member should contract to work for any agency not having the approval of the society. The county medical society then organized its own bureau to compete with existing legally supported contracts. This has forced abandonment of some private contracts. The bureau is a non-profit corporation and each member makes a separate contract on account of the legal necessity for medical practice and individual liability. The contract covers acute diseases and injuries, and acute exacerbations of chronic diseases. The Medical Service Corporation takes contracts with groups only, and the plan of organization is here shown:



Results have been good on the whole. Family service is still opposed by most members of the medical society. At present this system cares for the wage-earner, alone. Eleven such bureaus exist in the State of Washington.

Expense: Paid out of premiums—
5.6 % overhead
20.8 % hospitals
2.24% nurses
8.47% drugs
1.43% emergency professional service by non-members
34.26% total medical expense
54.87% available for member physicians

There should be a reserve of $1 per person under contract. A contract is most expensive during its first three months. Payment to physicians is on a unit basis. At present it equals about 50 cents; later in the summer it will be 60 cents. Premiums have been raised when necessary without much difficulty. In one county physicians received $115,000, otherwise lost. Advantages: the unit system keeps the scheme in good financial condition and automatically cuts down unnecessary hospital days, drugs, etc.; the patient has his choice of any physician in the bureau; and the standard of service is much higher than that of private contracts. Disadvantages: drug bill, the patient should pay part of the drug bill to avoid patient-demand for unnecessary medication; length of hospitalization is 10 per cent greater in urban than in rural practice owing to increase in traffic accidents; full coverage would be more ideal; increased morbidity, this can be controlled by raising premium rates.

2. Hospital Associations.

Discussion: Oregon (Mr. Foley)—The oldest "hospital association" in Oregon dates from 1906. These associations do not operate hospitals but act as insurance bodies. The pattern for these organizations is provided by statute and originated with the lumber industry and the conditions peculiar to it; but the system later moved into the cities. The total income to these associations (including a few companies in neighboring states) was, in 1930, $944,865. This situation is old in the Pacific Northwest. The plan approved by the medical society in October, 1932, was for competition with these older lay companies. It is capitalized for $30,000, and while organized separately from the county medical society, it operates under a certificate of approval from the medical society. (Portland.)

Types of contracts (modeled on those of the proprietary companies):

"Standard"—for acute illness or injury, $1.50 per month. "Full-Coverage"—includes chronic, non-venereal cases, $2 per month. "Special Contracts"—patient has choice of physicians on panel; hospital facilities, ward care. The morbidity is high.

Originally the maximum income level was set at $1,500 per annum. Now it is $1,800, and occasionally the executives of a plant are included. School teachers are taken by units as schools. Fees are paid on a percentage basis of an adopted schedule and vary from 10 to 40 per cent. Costs: drugs, 8 per cent, hospital 15 per cent, administration 12 per cent. There is no separate plan of group hospitalization.

E—Postpayment medical care—

1. Medical Service Bureau.

Discussion: Indianapolis (Dr. Beatty)—The Indianapolis Medical and Dental Societies have a contract with a business bureau which works out financial details between doctor and patient. The average cost of investigating a case is 75 cents. This service was adapted to a previously existing collection agency. Wayne County, Mich.—cases requiring hospitalization form 66 per cent of the total handled by the bureau. Sources of patients: 53 per cent referred to the bureau by physicians, 30 per cent by industry, 16 per cent by charitable agencies. Average bill for all cases, $93. Average for hospital cases, $135; $72 to the doctor and $62 to the hospital. Rate of collections: 64.5 per cent of perfect. On March 31, 1935, 75 per cent of the bureau's accounts were less than 90 days delinquent. In any installment system, hospitalization entails certain immediate out-of-pocket costs. This brings in the use of a revolving fund or some sort of banking arrangement. The actual overhead cost of collection is 3.5 per cent. The bureau deducts 10 per cent. In Detroit the hospital situation is not so well in hand as in the District of Columbia.

Washington, D. C.—(Ross Garrett, Dr. Wilson) chief working principle: Hospitals can offer nothing except facilities; the doctor (dentist, nurse) exclusively can offer service. The D. C. plan was set up without consulting the hospitals, and they had to "come through" because all civilian hospitals are supported by contributions from the public. The physicians can control the use of their service if they will.

Des Moines, Iowa—is trying a modification of the Detroit plan (Wayne county), effective since April 1, 1935, and including 200 physicians.

2. Part pay or reduced fee—

(Based on social service investigation.)

Discussion: Alameda County, Calif.—(east side of San Francisco Bay—Oakland is county seat); population, 500,000, area over 200 square miles, with 35,000 rural inhabitants. The plan really began in 1917, with the formation of the County Institutions Commission (non-partisan). The idea is to take care of any person in Alameda county on the basis of ability to pay. The doctors are satisfied with the arrangement. The plan employs its own medical social workers, who simply determine whether a person is indigent, and they refer those able to pay anything at all to private physicians who collect their own fees. Indigency is determined on the basis of 1) local residency; 2) must require medical care as determined by a doctor; 3) must be unable to pay for such care on the basis of "basic necessities of life"—the so-called Heller Budget (Univ. of Calif.). A credit rating bureau is used to supplement the activities of the social workers. Examples of amounts collected from part-pay patients: 1933, $5,000; 1934, $15,000. To extend hospital care it is proposed to organize the East Bay Mutual Hospital Association, with the majority of the directing board members of the county medical society. Premiums would be $1.00 per month for individuals, and for families down to 60 cents per month per person. This plan is held up at present on account of the lack of $50,000 capital required by insurance laws. This county has a non-partisan board in control of county medical institutional affairs.

3. Central Medical Service—

(Social service and patient routing).

Discussion: none.

F—Hospital Care—

1. Prepayment for hospital facilities only.

Discussion: New York (Dr. Farmer)—People in general have appeared apathetic when offered this plan. Ohio (especially Cleveland)—this plan is found to lead to inclusion of medical service as well as facilities. There is a collision between the insurance principle and the sliding fee schedule.

I—FERA combination with any of the above classifications.

Discussion: Pennsylvania—emergency relief plan here is eighteen months old, and based on: (1) collective bargaining between organized medicine and the state, (2) the individual fee system, and (3) free choice of physician. Three counties have plans patterned after the Emergency Relief Plan. Valuable experience is gained in working out plans for care of the indigent and other income groups can later benefit from this experience. A survey is to be made with money supplied by the Works Administration.

Remarks by R. G. Leland—

A change is predicted in FERA Plans, with regard to medical service, by July 1, 1935. It is likely a permanent plan may be suggested.

Olin West—

All past experience shows the inevitability of voluntary health "insurance" becoming compulsory. We are in danger of educating the entire population to the idea that good medical and hospital service can be obtained at a nominal price. It of course can not be done. Strong forces are at work in the United States with the intention of tearing down the professional status of medicine.

The conference gave its recommendation and approval to the following:

PRINCIPLES TO INCORPORATE IN COUNTY MEDICAL SOCIETY PLANS

In addition to the ten principles adopted by the house of delegates in Cleveland in 1934 for guidance of county medical societies in the conduct of medical service experiments, the following principles and administrative details are offered:

1. Preliminary study.
2. Freedom of choice of physican.
3. Complete control by county medical society.
4. Medical fees for low-income groups based on ability to pay rather than minimum fee schedule.
5. Fair determination of patient's ability to pay.
6. Centralized records and bookkeeping.
7. Complete medical service. (See page 2 of "Tentative Classification of Medical Plans.")
8. Administration—a) Service charge for operation of office; b) reserve for: 1) emergencies, 2) catastrophic loads.
9. Recognition of standing of medical specialties and resistance to exploitation by corporations of any type.
10. Plan must be acceptable to the State Medical Association. (N. B. Under principle 2 it must not be assumed that all official positions must be filled by doctors. Other agencies should participate.)

While this conference decided finally that which has been assumed by many for some time, namely, that no one plan for medical service can be operated over the entire United States, everywhere in the same form, the discussion was stimulating, and the above principles, if adhered to together with the ten principles of the A. M. A., should result in an acceptable plan for any given community. These principles, etc., are all based on a major premise that some plan different from the present system is desirable. This matter the conference did not attempt to solve or answer, but as far as I could tell, took it as assumed, at least for the purpose of discussion, that a reformation in medical economics is needed.

As I listened to the men from different parts of the country tell about their local problems, and how some of them have to be met, I could not help feeling that we in Indiana are not so unfortunate, after all. If the profession in this state will but act as a unit in these matters, there is no doubt in my mind that the professional status in Indiana will not be tord down and that the people will receive good medical care. To do this, however, we must begin to take more positive and less negative action.

Respectfully submitted,

A. W. Cavins, M. D.,

Special Representative of the I. S. M. A.

(Dr. Norman Beatty of Indianapolis also attended this meeting as a representative of the Indianapolis Medical Society.)

MEDICO-LEGAL DEPARTMENT

(Continued from page 406)

tional requirements, but in the main the FERA requirements have been standardized and then the State Board of Accounts, as we understand it, has made the forms so that they would fit the requirements of the FERA and at the same time would be adapted to the matter of preserving the records of the business transactions of the trustee. Thus the form where the FERA was assisting would not differ as to some of the features, at least, from what the form would require where no FERA aid was received.

MEETING TODAY'S CHALLENGE

(Continued from page 402)

as worthy and with a good credit risk, amounting to approximately $4,800.

What might have happened to the case just reviewed or any one of those since handled had not this plan been in effect? What happened previous to its inauguration? There was only one settled fact in the mind of this employee and that was that his wife needed an immediate operation. If he had the security to borrow upon, it would be at an excessively high rate of interest. He no doubt could get a physician to render service and wait for his money but the hospital *had to be paid.* He might get into the city hospital, but he was working and wanted to pay his way. He was neither desirous of nor eligible for this tax-supported service. He might try a "guaranteed-to-cure" advertiser, and load up with patent medicines, or possibly lose his wife through uncontrolled postponement of the operation.

A debate on this subject might bring the reply from a physician that there is nothing new in all this. He has been extending credit ever since he has been practicing medicine; he will and has rendered service to practically any one and waited for his money. True enough, but that is neither fair nor satisfying to the patient. In this day of uncertainty, of unemployed periods, shorter hours and reduced pay, the honest, industrious worker *wants a definite program to follow when emergencies arise* and there is no emergency like *health protection and care.* He wants to know exactly what he is going to pay for something, how he is going to pay, and he wants to talk about it. Credit may be his only asset and he wants to protect it. The majority of our citizens,

thank goodness, are still bravely striving to retain their pride, to be independent, and to use their own common intelligence, but they do need some guideposts to point the way.

And, too, isn't an economic program of balancing medical cost to income, based on scientific procedure, supervised and controlled by an organiation like the Indianapolis Medical Society, a splendid answer to some of the questions arising from the discussions of socialized medicine?

BOOK REVIEWS

BOOKS RECEIVED

LILLY RESEARCH LABORATORIES—DEDICATION. The celebration of the dedication of the new Lilly Research Laboratories. Containing the papers presented at the dedicatory exercises and a complete description of the new building. 128 pages. A limited edition, presented with the compliments of Eli Lilly and Company.

* * *

SURGICAL CLINICS OF NORTH AMERICA. Issued serially, one number every other month. Volume 15, Number 3. Chicago Number, June, 1935. 239 pages with 119 illustrations. Per clinic year, February, 1935, to December, 1935. Paper, $12.00; cloth, $16.00. W. B. Saunders Company, Philadelphia and London, 1935.

* * *

TEXTBOOK OF CLINICAL NEUROLOGY. By Israel S. Wechsler, M. D., Professor of Clinical Neurology, Columbia University, New York. Third edition, reset. 826 pages with 162 illustrations. Cloth. Price $7.00. W. B. Saunders Company, Philadelphia and London, 1935.

* * *

OBJECTIVE AND EXPERIMENTAL PSYCHIATRY. By D. Ewen Cameron, M. B., Ch. B., D. P. M., physician in charge, Reception Service, Provincial Mental Hospital, Brandon, Man. 271 pages; cloth; price $3.00. The Macmillan Company, New York, 1935.

* * *

BOOKS REVIEWED

MANUAL OF THE PRACTICE OF MEDICINE. By A. A. Stevens, M. D., formerly professor of applied therapeutics in the University of Pennsylvania. Thirteenth edition, revised. 685 pages. Cloth. Price $3.50. W. B. Saunders Company, Philadelphia and London, 1934.

Especially prepared for students, this compendium of information improves even upon its many predecessors. The busy general practitioner should find it a very handy volume for ready and authoritative reference. Much obsolete matter has been deleted, numerous additions have been made, and many sections and paragraphs have been entirely rewritten. Altogether, the subject matter is presented in worthwhile formation and classification.

* * *

APPLIED ANATOMY. The Construction of the Human Body, Considered in its Relation to its Functions, Diseases and Injuries. By Gwilym G. Davis, M. D., late professor of orthopedic surgery and associate professor of applied anatomy in the University of Pennsylvania. Ninth edition, reset, re-illustrated and completely revised by George P. Muller, M. D., professor of clinical surgery, graduate school of medicine, University of Pennsylvania; assisted by B. J. Alpers, M. D.; Robert A. Kimbrough, Jr., M. D.; S. W. Moorehead, M. D.; I. S. Ravdin, M. D.; and S. Dana Weeder, M. D. 717 pages, with 674 illustrations. Cloth. Price $9.00. J. B. Lippincott Company, Philadelphia, London, and Montreal, 1934.

It is quite difficult to review this extensive text in a few sentences and paragraphs. Many able physicians, anatomists and surgeons collaborated in its revision. The book instead of aiming at mere encyclopedic facts, proposes to teach surgical principles through a correlation of anatomic relationships. In this it has succeeded, and the volume should find appeal to the student, the physician, and more especially to the surgeon.

* * *

PHYSICAL DIAGNOSIS. By Warren P. Elmer, M. D., Associate Professor of Clinical Medicine, Washington University School of Medicine; and W. D. Rose, M. D., late Associate Professor of Medicine in the University of Arkansas. Seventh edition. 919 pages with 342 illustrations. Cloth. Price $8.00. C. V. Mosby Company, St. Louis, 1935.

In this edition the general form has not been changed as compared with previous issues. However, it has been brought up to date by notable additions on aortic murmurs, silicosis, and the later diagnostic methods.

Part I is devoted to the technique of physical examination and normal physical diagnosis. Part II deals with the diagnosis of the various disease conditions.

The text is suited quite admirably for both the medical student and for the busy practitioner who desires a handy volume for reference and review. The illustrations supplement the reading matter in quite a useful and instructive array.

* * *

THE PRINCIPLES AND PRACTICE OF UROLOGY. By Frank Hinman, A. B., M. D., Clinical Professor of Urology at the University of California Medical School. 1,111 pages, with 513 illustrations and 48 tables. Cloth. Price $10.00. W. B. Saunders Company, Philadelphia and London, 1935.

Too infrequently there appears a comprehensive report of the principles and practice of any specialty, but now and then an author takes the time and devotes the energy necessary to turn out a perfect text. Dr. Hinman has done that very thing. When one inspects his most recent work, "The Principles and Practice of Urology," there is that first impression that here is a real book. Beginning at the first of it he discusses the principles of urology, which he divides into Division I and Division II, with subdivisions under each of those headings. His first subdivision deals with the comparative anatomy of the urogenital tract and there are some reasons to think that his analysis of the comparative anatomy involved is the most interesting portion of the book. He gives a hundred pages full of authentic material well illustrated and presented in a way that makes it readable. He then gives thirty-eight pages of the development of urogenital organs in man, and then more than a hundred pages to the normal structure and function. To any one who is interested in urology these subjects are obviously the groundwork for an understanding of principles and practice.

There can be no doubt that Dr. Hinman was not trying just to turn out another book. His thoroughness in looking after every detail is everywhere evident in the text. It gives no appearance of being an encyclopedia or a many volume work, yet it reaches almost those proportions in its inclusions. The medical student who wants a knowledge of urology will find the text all that he could desire. The general practitioner will find the answer to his daily urological problems, and the urologist will find it refreshing to pick up a text so full of "urology" that he will find it difficult to stop reading or will hurry back to the book for details. One would gather from this reviewer's statements that he likes the printed results of Dr. Hinman's labors. It is indeed a stimulus to study.

* * *

CLINICAL MANAGEMENT OF SYPHILIS. By Alvin Russell Harnes, M. D., chief of the congenital luetic clinic of New York Hospital. 71 pages. Cloth. Price $1.50. The Macmillan Company, New York, 1935.

Dr. Harnes' book is well titled "Clinical Management of Syhilis—A Handbook for Everyday Practice." That is

exactly what it is. There is no subject, perhaps, which is more in the mind of the practitioner than that of the management of syphilis. For such a person, this small book will be useful. It does not pretend to be anything other than a resume of those cardinal principles in the intelligent management of a luetic infection, and on that score it will serve a very useful purpose.

* * *

METHODS OF TREATMENT. By Logan Clendening, M. D., Clinical Professor of Medicine, Medical Department of the University of Kansas, Attending physician, Kansas City General Hospital, and physician to St. Luke's Hospital, Kansas City, Missouri. Chapters on special subjects hy H. C. Andersson, M. D., Ursulla Brunner, R. N., J. B. Cowherd, M. D., Paul Gempel, M. D., H. P. Kuhn, M. D., Carl O. Rickter, M. G., F. C. Neff, M. D., E. H. Skinner, M. D., E. R. DeWeese, M. D., and O. R. Withers, M. D. Fifth edition. Cloth. Price $10.00. The C. V. Mosby Company, St. Louis, 1935.

It is a far cry from the textbooks of a previous generation to Logan Clendening's "Methods of Treatment." The fact that the book is appearing in a fifth edition within a few short years is a sufficient guarantee of its excellence.

Dr. Clendening has succeeded in making the study of general therapeutics a real joy. This is best attested hy a few quotations from the work itself.

"It seems to me that there are more violations of the rule of rest in therapeutics than of any other established principle. Giving a cathartic in the face of an acute abdominal pain is an instance. It is almost instinctive on the part of some physicians to do it, but it is very bad therapeutics. Worse than that, it is the principal way doctors kill people, I believe. An acute abdominal pain, not associated with diarrhea in an adult, is usually appendicitis. Other possibilities are gallstone colic, renal colic, pneumonia, fecal impaction, intestinal indigestion, strangulated hernia, and labor. A rare possibility is intestinal obstruction other than strangulated hernia. In most of these the cathartic does no good. In appendicitis—the most frequent—it always does harm . . . What is needed is *rest*. I have seen this admonition violated so often that I feel it cannot be overemphasized."

In discussing cincophen and neocincophen as drugs for relieving joint pains, and referring to their injurious effects upon the liver, ". . . have expressed a fear that patients will be deprived of a valuable drug if these experiences with cincophen are accepted without analysis. They point out that most of the cases of cirrhosis occurred in patients who had administered extra therapeutic doses to themselves without medical direction, and they report experiments in which they were unable to produce cirrhosis in animals with large doses of the drug. Their protest must, of course, have some weight, but any physician can decide whether he would like to use the drug on himself and govern his directions to his patients accordingly."

After considering the drugs ordinarily used to neutralize acidity: "This being the state of the evidence, what is the ordinary practitioner to do? His conceptions are often upset in this way, by some nervous laboratory worker rushing in with the news that a drug which he is constantly using has no pharmacologic action. He has no time to check the experimental work himself. In these circumstances, my own attitude is that if I have been convinced that the drug I have been using was doing no harm, and if I believed it was doing some good, I continued to use it, experimental evidence to the contrary notwithstanding. Often the experimental evidence has switched—witness the Bunge theory of iron, and the use of digitalis in aortic insufficiency. On this basis I see no reason for discontinuing the use of belladonna in hypersecretion."

The book abounds in sensible advice to both practitioner and student, and deserves a place in every doctor's library.

It is also interesting to note that the publishers have presented this volume in a new type of binding which while pleasing to the eye is also water-resistant, resists the attacks of book-worms, and will not become sticky when handled with moist hands.

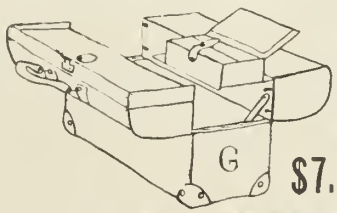
PROFESSIONAL PROTECTION

SINCE 1899 SPECIALIZED SERVICE

A DOCTOR SAYS—

"Now I can understand why an old friend and doctor told me when I started to practice to get in touch with The Medical Protective Company. He said I would avoid a lot of sleepless nights. Thanks, so much!"

THE MEDICAL PROTECTIVE COMPANY
OF FORT WAYNE, INDIANA
WHEATON, ILLINOIS



Physicians' BAGS
$7.98 to $20
GAUSEPOHL TRUNKS
51 MONUMENT CIRCLE Indianapolis

Important to Your Babies!

ACCEPTED American Medical Assn. Committee on Foods



Larsen "Freshlike" Strained Vegetables are first quality garden fresh vegetables cooked, strained and sealed under vacuum to protect vitamins and mineral salts. For further protection we seal in special enamel lined cans.

All Varieties 10c Per Can

LARSEN'S "Freshlike" Strained Vegetables

THE LARSEN COMPANY, Green Bay, Wis.

PHYSICIANS' DIRECTORY

SURGERY AND GYNECOLOGY

EDMUND D. CLARK, M.D.
Practice Limited to
Abdominal and General Surgery
712 Hume Mansur Bldg. Indianapolis, Indiana

Hours: 11 to 1, or by appointment Phone: Hemlock 2226
WILLIAM N. WISHARD, M.D.
HOMER G. HAMER, M.D.
HENRY O. MERTZ, M.D.
WILLIAM N. WISHARD Jr., M.D.
Genito-Urinary Diseases
1711 N. Capitol Avenue Indianapolis, Indiana

Hours: 12 to 2, and by appointment
P. E. McCOWN, M.D.
Diseases and Surgery of the Genito-Urinary Organs
521 Hume Mansur Bldg. Indianapolis, Indiana

Office Hours: 11 to 12, 3 to 5 and by appointment
PHONE Ri. 7926
R. O. McALEXANDER, M.D.
Surgery and Diseases of Women
740 Bankers Trust Bldg. Indianapolis, Indiana

HOURS: 12 to 4, and by appointment
PHONE: Office Lincoln 3125
FRANK C. WALKER, M.D.
Gynecology and Abdominal Surgery
Hume Mansur Bldg. Indianapolis, Indiana

JOHN H. EBERWEIN, M.D.
Practice Limited to
Abdominal and General Surgery
720 Hume Mansur Bldg. Indianapolis, Indiana

JEWETT V. REED, M.D.
General and Abdominal Surgery
820 Chamber of Commerce Bldg.
Indianapolis, Indiana

PHONES: Office, Riley 1714; Drs. Exch., Cherry 2031; Res., Wash. 2321
C. O. McCORMICK, M.D.
Practice Limited to
Obstetrics and Gynecology
504 Medical Arts Bldg. Indianapolis, Indiana

NORMAN E. JOBES, M.D.
Surgeon
Traction Terminal Bldg. Indianapolis, Indiana

Hours: 2 to 3 daily except Wednesday and Sunday
GOETHE LINK, M.D.
Practice Limited to Surgery
608 Indiana Pythian Bldg. Indianapolis, Indiana

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

OFFICE OF PUBLICATION: 1021 Hume Mansur Bldg., INDIANAPOLIS, INDIANA

VOLUME 28 SEPTEMBER, 1935 NO. 9

ORIGINAL ARTICLES

SURGICAL MANAGEMENT OF PEPTIC ULCER*

EDGAR H. WEBER, M. D.
EVANSVILLE

A review of the medical literature on the subject of peptic ulcers unearths a perfect maze of controversy. One can state most anything in reference to this subject and quote so-called good authority to substantiate it. It is difficult to reconcile such conflicting opinions as, for instance, that perforation of an ulcer is the only indication for surgery, or that all ulcers demand surgical treatment. Statistics would indicate that the mortality from partial stomach resection is anywhere from 2½% to 25%; again that the incidence of gastro-jejunal ulcers following gastro-enterostomy is anywhere from 1% to 34%. These conflicting opinions result from etiological ignorance, prejudice, and the substitution of impressions for facts.

MEDICAL ASPECT

There is no consideration of the management of ulcers without a brief mention of the medical aspect. In a measure, cooperation between surgeon and gastro-enterologist is replacing strife, and yet there is still much difference of opinion regarding the majority of uncomplicated chronic ulcers. It is pretty generally agreed that all surgical procedures should be augmented by post-operative medical measures and preceded by the same whenever possible. Furthermore, most all uncomplicated ulcer victims are entitled to a trial on medical management. However, I contend that the results so obtained upon the mass of ulcer patients, by the rank and file of physicians, are poor. There can be no condemnation of the medical care of ulcer by painstaking medical men who have the prolonged cooperation of ideal ulcer patients economically able to maintain such medical therapy, but I do rebuke the result, be it the fault of the patient, the physician, the method, or all three. Add to these unrelieved victims those who fail to respond to adequately controlled medical care, or who develop such complications as hemorrhage, perforation, or obstruction, and one has a large field for the surgical treatment of ulcer.

The purpose of all treatment is to relieve symptoms and prevent complications. However little we know as to the cause of ulcer, it seems clear that hyperacidity and pylorospasm maintain it. Hyperacidity will cause pylorospasm and the latter will cause accumulation of secretions in the stomach, thus increasing acidity; in this way a vicious cycle is established. It is the purpose of all treatment, medical or surgical, to eliminate these two factors, and allow healing of the ulcers. All surgical operations are directed at allowing alkaline regurgitation from the intestine back into the stomach in order to neutralize acidity, and indirectly allay pylorospasm. Some add a direct attack upon the pyloric sphincter to stop spasm, and the radical procedures add an excision of that portion of the stomach and duodenum which is susceptible to the formation of ulcer.

INDICATIONS FOR SURGERY

A consideration of the indications for surgery brings one forcibly into the field of controversy. One can say with considerable conservatism, however, that the following warrant surgery:

1. Chronic peptic ulcers resistant to medical care.
2. Repeated clinical hemorrhages.
3. Real pyloric obstructions.
4. Perforation of ulcer.
5. Gastric ulcers that do not respond promptly to medical care, or in which there is uncertainty as to whether or not it is malignant. In this connection it is important to remember that nearly all ulcerations along the greater curvature of the stomach are malignant.

* Presented before the Vanderburgh County Medical Society, June 25, 1935.

Hemorrhage occurs in about 10% of gastric ulcers and 19% of duodenal ulcers. Operation for the control of hemorrhage in the acute stage is exceedingly dangerous surgery. An operation which is sometimes prolonged and occasionally difficult adds to the shock already present. Thus a relatively low mortality (2%), when conservative treatment is instituted, is materially increased by surgical intervention. Moreover, one might be dealing with hemorrhage from another cause, such as Banti's disease or liver cirrhosis, and mistake it for ulcer bleeding. It is much safer to treat these people by repeated transfusion, continuous intravenoclysis if necessary and avoid everything orally. They do, however, require surgery later, as hemorrhages tend to recur and the bleeding type of ulcer does not usually respond well to medical treatment. These ulcers are very frequently located on the posterior aspect of the first portion of the duodenum and often cause no symptoms except those associated with chronic or acute internal hemorrhage. It is a pertinent fact that gastro-enterostomy is of little avail in curing this type of lesion. I have repeatedly seen hemorrhage in patients with a history of having had gastro-enterostomy performed. They need more radical surgery.

My own experience is that about 90% of perforations are on the anterior surface of the duodenum, adjacent to the pylorus. With perforation, controversy centers about whether or not to add a curative operation to the life saving measure of simply closing the perforation. In neglected cases with purulent peritonitis it is inadvisable to do more than the closure. It has always been my practice to add suturing of the free edge of the gastro-hepatic omentum over the opening for security against leakage, but I have avoided any further procedure, feeling that perforation itself will cure a few ulcers and that it is unwise to spread contamination throughout the peritoneal cavity. Moreover, the leakage at perforations enhances peritoneal resistance and seals the lymphatics so that future surgery can be done with less danger. I recall operating a man for a second perforation, who had a free duodenal opening of thirty hours duration with an abdomen full of pus, and who recovered without serious toxemia; this was due undoubtedly to the peritoneal immunity induced by a previous perforation. Post-operatively, the stomach can be collapsed by nasal drainage, thus accomplishing what some give as the reason for doing gastro-enterostomy at the time of the primary operation. It is inadvisable to place drainage at the site of a free perforation inasmuch as it invites a dreaded high fistula. If operation is performed soon after perforation, it is unnecessary to drain at all; when the fluid becomes partially or entirely purulent it is wise to drain to the most dependent part of the pelvis through a suprapubic stab wound. A rigid fenestrated glass tube, when so used, assures one of reaching the bottom of the pelvis and allows the evacuation of accumulated pus and secretions, at intervals, through a suction syringe; if such a tube is used, it is essential that it be given a complete circular turn at each evacuation (4 to 6 hours) so as to prevent herniation of the bowel through the fenestrations.

Pyloric obstruction is often due to edema and swelling about the ulcer and will lessen with rest and diet. True stenosis is from periduodenal adhesions or cicatrix from an old healed pyloric ulcer. These are the ideal cases for gastro-enterostomy. A healed cicatricial ulcer may produce enormous dilatation of the stomach with symptoms and x-ray findings most suggestive of cancer; however, in the absence of metastasis, such cases should be explored. Even large pyloric masses may prove to be oedematous scar tissue; in addition there may be enlargement of the glands in the gastro-hepatic omentum which are only inflammatory. Carcinomatous growths and glands are apt to be irregular and very hard. In the absence of this hard irregularity indicating peritoneal or liver metastasis, the condition should be regarded as benign and dealt with accordingly. I know of no operation that is followed by such strikingly brilliant results as gastro-enterostomy when performed for benign obstructive lesions at or near the pylorus.

Gastro-enterostomy is an old and established operation, capable of competent performance by many surgeons. It has a wide field of application and gives good results in the treatment of ulcer. Its purpose is not, as was formerly thought, to shunt food away from the ulcer, but rather it is to allow alkaline intestinal secretion to regurgitate into the stomach, neutralizing acidity and thus overcoming both the cause and the effect of pylorospasm. If placed dependently, it also drains the stomach or residual gastric juices. Reliable clinics report 75% to 85% cures of ulcers in properly selected cases by posterior gastro-enterostomy. As stated, it is the operation of choice for duodenal or pyloric ulcers with marked obstruction and dilated stomachs. Combined with excision of the ulcer, excellent results may be expected from this operation for gastric ulcers when the latter are not too extensive. Stomach ulcers rarely follow gastro-enterostomy under the latter circumstances. There are competent surgeons who use gastro-enterostomy almost entirely for all types of peptic ulcer and claim excellent results. Its one real nemesis is gastro-jejunal ulceration, the occurrence of which I believe is exaggerated. During a twelve year experience of association with a large surgical clinic, where gastro-enterostomy was a fairly common operation, I can only recall having seen two such ulcers. When they do occur and fail to respond to medical measures, the anastomosis should be severed, excising the ulceration, the stomach opening should be closed and the edges of the jejunum anastomosed end-to-end. Radical surgery may be considered later. Gastro-enterostomy has other hazards; leakage should not occur with careful technique. Post-operative cyclic vomiting has

been practically eliminated by keeping the jejunal loop taut. Hemorrhage from the anastomosis should be rare, but when it occurs in sufficient amount to demand its arrest, one may approach it easily, and without disturbing the anastomosis, by performing anterior gastrotomy and having an assistant evaginate the anastomosis through the longitudinal stomach incision; this allows easy access to the inside of the anastomosis and it may be encircled with a running hemostatic suture.

Many forms of pyloroplasty have been devised and many have merit. Excellent results have in recent years been reported from gastro-duodenostomy which also includes excision of the ulcer and the anterior two-thirds of the pyloric sphincter. This procedure is obviously only applicable when the lesion is adjacent to the pylorus and the duodenum sufficiently mobile to allow such anastomosis. It would apply especially to those duodenal ulcers for which gastro-enterostomy is not particularly suitable. This operation eliminates the lesion, restores the normal continuity of the gastro-intestinal tract, allows alkaline regurgitation, eliminates pylorospasm, and does not interfere with further surgery should any become necessary. It is the safest of the curative operations for peptic ulcer; the mortality, in good hands, is less than one per cent.

Partial gastrectomy has become a common operation in the European countries, and has developed many enthusiasts in this country. The purpose is to excise the lesion and the entire ulcer-bearing area of the stomach and first portion of the duodenum; it further removes the pyloric sphincter entirely and allows alkaline regurgitation into the remaining portion of the stomach. It carries with it the highest per cent of surgical cures, but it also carries the highest operative mortality rate (perhaps ten per cent in good hands). Unless one is particularly skilled and has opportunity to perfect technique, this operation should be limited to those ulcer victims who have a definite indication for it and who are good surgical risks.

Indications for radical stomach resections are:

1. When there is a question of the ulceration being malignant.

2. When previous more conservative operations have failed.

3. For those ulcers associated with serious bleeding.

4. Extensive gastric ulcerations unfavorable for local incision and gastro-enterostomy.

All these surgical procedures should be preceded by careful pre-operative preparation and dietary therapy. Subsequently a strict medical regime should be continued for six months to one year, in order to allow readjustment of the gastro-intestinal mechanism.

9 S. E. Second St.

THE INCIDENCE OF CARDIAC DISEASES IN 297 CASES

A. G. MOORE, M. D.
DEER CREEK, IND.

The following data was obtained from 2,376 examinations of 297 cases having a cardio-vascular abnormality. The basis upon which this article is presented is as follows:

First—A systolic blood pressure of 150 millimeters of mercury and a diastolic blood pressure of 90 millimeters of mercury.

Second—Enlargement of the heart.

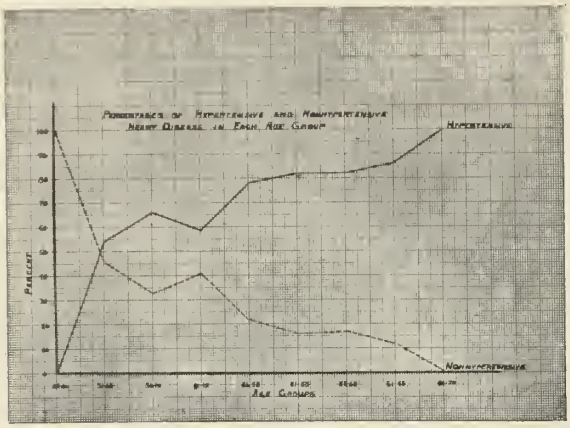
Third—The appearance of a cardiac murmur.

There was also tabulated the age, pulse rate, rhythm, and arterio-sclerosis, as it was apparent to the examiners, in the palpable arteries, such as the radial and brachial, and accentuations of the aortic or pulmonic second sound.

It is true that these examinations are not detailed enough to permit one to look at the record and be able to be absolutely certain of the anatomical diagnosis in every case. However, these cases divide themselves into two great groups of cases, which are readily discernible, that is, first the hypertensive and, second, the non-hypertensive or valvular cases.

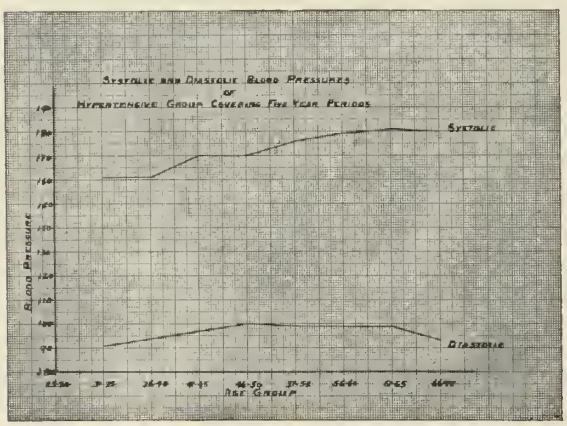
It is in the latter group that the anatomical diagnosis is most uncertain from the records. However, even with the most detailed and careful examination possible, with mechanical aid, such as the x-ray and electro-cardiograph, it is often difficult or impossible correctly to evaluate a cardiac murmur, especially one occurring in systole at the apex or the aortic area.

It was assumed on the principle that if such a murmur is present and the individual has an enlarged heart without an elevated blood pressure, it is probably significant of a damaged heart valve. If the same murmur occurs in the presence of a definite hypertension, it is, therefore, grouped in the hypertensive class. Of course, the presence of an elevated blood pressure does not eliminate the possibility of a valvular lesion, but I think in such cases the murmur is most likely to be secondary to the hypertension. The dilatation of the mitral ring, as a result of the strain put on the left ventricle by the increased blood pressure, will result in a systolic murmur at the apex, which can not be distinguished from that due to a deformed valve, except with a very recent history of an acute infectious disease with predilection for the heart. The arterio-sclerosis of the aorta with subsequent roughening of the intima will produce a systolic



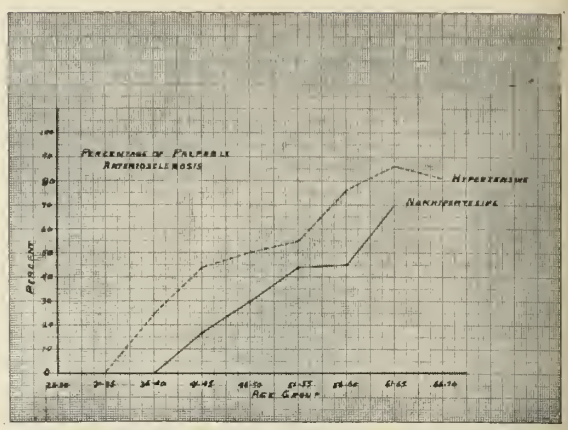
Graph No. 1

This graph shows very clearly the influence of age in the production of hypertension. As far as the individual himself is concerned there is very little known as to the etiology of high blood pressure. We do know the simple fact, however, that the older an individual is, the more likely he is to have an elevated vascular tension. As is seen in this graph, there were no cases under thirty years of age. From that age on there is a steady increase with each five year period, until between the ages of sixty-six and seventy, when all the cardiac cases fall in this group. The occurrence of the valvular cases is, of course, just the reverse. In this series, all the cardiac cases below thirty years of age were valvular, followed by a drop with each five year period, until there were none in the older age group.



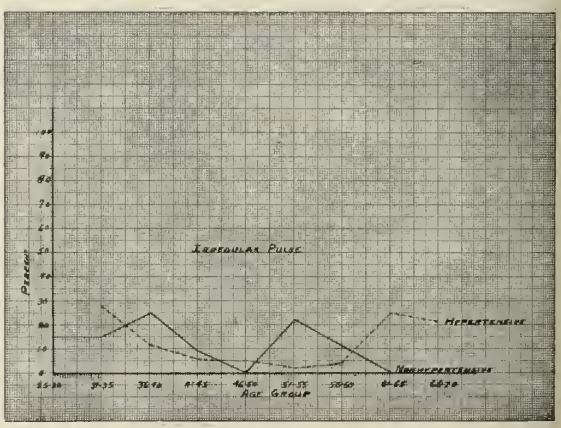
Graph No. 2

This graph shows the average systolic and diastolic blood pressures for the various age groups. It shows that after an individual's blood pressure rises above 150 millimeters of mercury systolic or 90 millimeters of mercury diastolic, it continues to increase gradually, but slowly. The systolic rises slowly until it has increased 20 millimeters of mercury in thirty years, and the diastolic rises only eight millimeters of mercury in the same time. The slight drop in the systolic and the definite drop in the diastolic in the sixty-six to seventy year age group is due either to an error because of the relatively small numbers of cases in this group, or it may signify a lowering due to a weakening of the heart muscle at this age. The former is the most probable.



Graph No. 3

From this graph it is evident that hypertension and age are the two significant factors in the production of a palpable arterio-sclerosis. It does exist in the valvular group, but begins at a later age than when the blood pressure is elevated. After once established, the ratio of increase of arterio-sclerosis seems to be independent of the blood pressure.



Graph No. 4

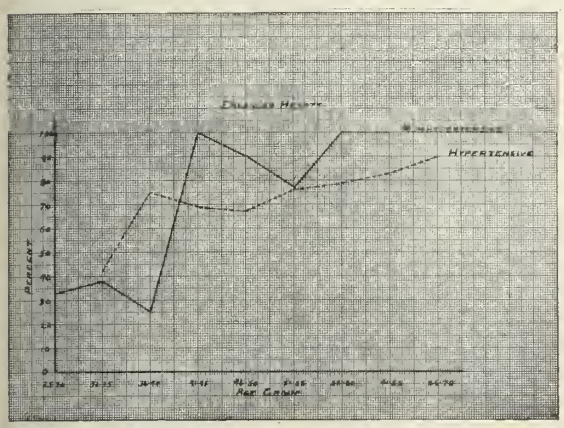
This group includes only hearts that are well compensated and probably for that reason an arrhythmia of the heart appears to be of very little significance. This curve is very irregular with no striking contrasts or relationships between the two groups. In going over the arrhythmias, it was felt that they were all due to extra systoles, except two which were in all probability due to an auricular fibrillation. One of these was in the non-hypertensive group and had a toxic thyroid, while the other was in the hypertensive group. The occurrence of extra systoles we do not feel is of any pathological or prognostic significance.

---

murmur at the aortic area. When the factor of hypertension is not present and the murmur still exists and the heart is also enlarged, the most reasonable assumption is that a damaged valve does exist. For these reasons, it is believed that this division of these cases into the hypertensive and the non-hypertensive, or valvular groups, is reasonably accurate. The one exception to this method of grouping the cases is in those with an aortic

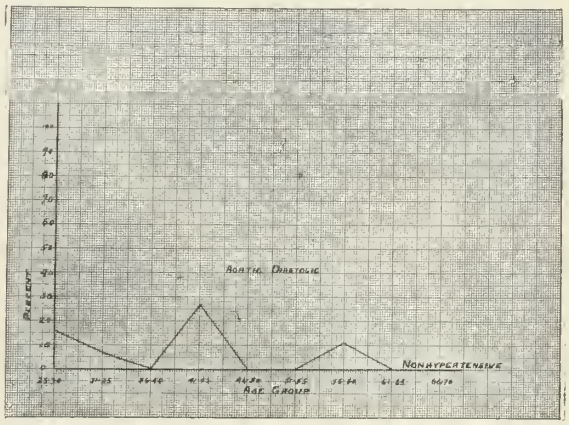
regurgitation, where it is recognized that the valve lesion results in a compensatory systolic hypertension. Therefore, in spite of the fact that these cases had a systolic blood pressure of over 150 millimeters of mercury, they were placed in the valvular or non-hypertensive group.

It was found that 231 cases, or 77.7 per cent of all those considered as having a cardio-vascular abnormality, fell in the hypertensive group. It is interesting to note that this percentage is almost exactly the same percentage that Cabot found in autopsy material from cardiac cases.



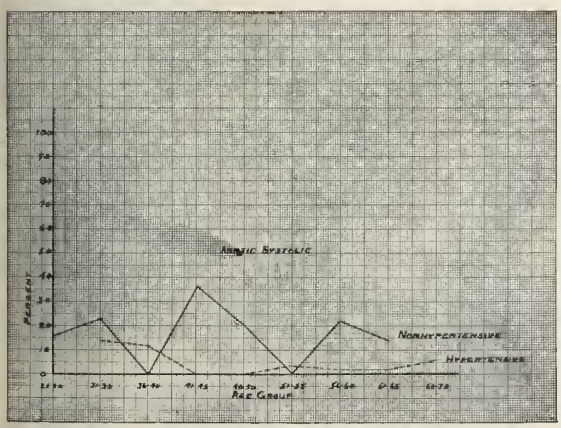
Graph No. 5

Any condition, either a valvular lesion or increased vascular tension, will increase the size of the heart to a detectable degree, if it acts over a period of years. This is probably the least accurate of any of the graphs, because without the use of the x-ray it is impossible for anyone to detect slight enlargements, which probably accounts for the relatively low percentage of enlarged hearts in the early age groups.



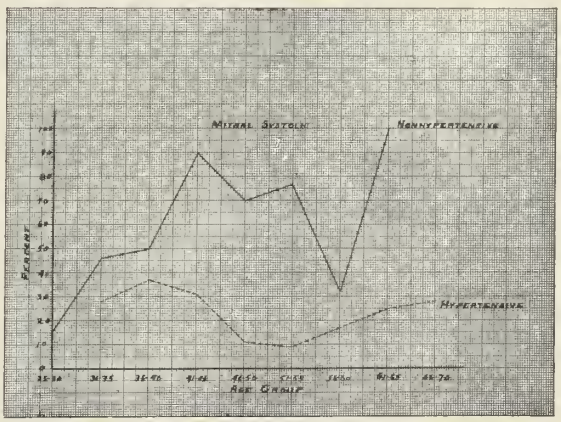
Graph No. 7

This graph shows the age groups at which aortic regurgitation occurs. We have no way of knowing with certainty, but from other statistics we feel that those in the age incidence before thirty-five are probably rheumatic in origin and those above forty years of age luetic.



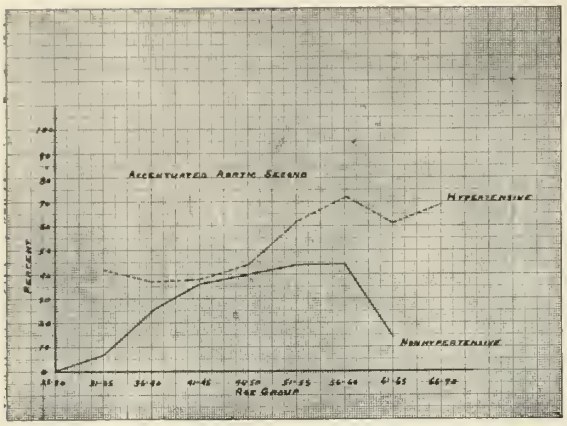
Graph No. 6

The aortic systolic murmurs in the non-hypertensive group are undoubtedly due to valvular lesions and will be found to correspond quite closely to those of the diastolic murmurs of the aortic area. The rather small and constant occurrence of systolic murmurs in the hypertensive group is probably an indication of the sclerosis of the intima of the aorta and has no significance as far as the aortic valve is concerned.



Graph No. 8

The correct evaluation of a mitral systolic murmur is extremely difficult, as here shown. The slightly higher percentage of mitral systolic murmurs in the early age group of the hypertensive cases would lead to an inference that a few valvular lesions with the young hypertensive individuals have been included. Except for this, the occurrence of the systolic murmur at the apex in individuals with a hypertension is found to be fairly constant. This graph further shows the high incidence of mitral systolic murmurs in the non-hypertensive individuals with an enlarged heart.



Graph No. 9

The accentuation of the aortic second sound is dependent upon the proximity of the aortic wall to the chest wall, the size of the aorta, and the elasticity of the aortic wall itself. Hypertension is probably the most potent factor in bringing this about, as evidenced by the fact that the percentage incidence of aortic accentuated second sounds is always higher in the hypertensive than in the non-hypertensive group.

CONCLUSIONS

First—The finding of a cardio-vascular abnormality is more common than is generally thought. I believe the increased nervous tension of today is in a great part responsible for the constantly increasing cases in the hypertensive group. The primary occurrence of the cases in the valvular group, especially in the earlier age findings, is probably due to intercurrent infections, while the nervous and mental element is probably conducive to increased hypertension as senile progression continues.

Second—77.7 per cent of the cardio-vascular abnormalities are included in the hypertensive group.

Third—After a systolic blood pressure of over 150 millimeters of mercury and a diastolic blood pressure of over 90 millimeters of mercury is once established, there is a gradual increase in the former and practically none in the latter.

Fourth—Palpable arterio-sclerosis becomes established five years earlier in the hypertensive group than in the non-hypertensive group, but following this its increase is practically in the same ratio for both groups.

Fifth—An irregular pulse in individuals with fully compensated hearts is nearly always due to extra systoles and is not of any pathological or prognostic significance.

Sixth—The foregoing graphs show that the individuals with a hypertension have a little longer span of life than those in the valvular or non-hypertensive group.

OBSTETRICS IN GENERAL PRACTICE

E. O. ASHER, M. D.
NEW AUGUSTA

Childbirth is mentioned in written records of the human race as far back as the archeologists have been able to decipher the marks on tablets and stones.

It is the belief of the general practitioners that members of the very early races had some experience in the reproductive processes even before they began to make heiroglyphics about it!

Birth, next to death, yet remains to us all an event of the greatest importance. Midwifery as an art or profession has traveled a long, weary road full of labor and travail. In the history of the art of attendance on childbirth, the laurels go to the Athenians. "The Greeks had a word for it" —obstetrics.

Obstetrics and the general practitioner—the care of an obstetrical case implies an unwritten contract between patient and physician for service and for a fee. There is no common understanding among physicians as to what that service includes nor any uniformity as to the amount of the fee.

PRENATAL CARE

The value to patients of prenatal care is common knowledge among younger physicians. The laity has been well sold on this care by the press, insurance companies, and other sources of medical information. If the contract with the patient provides free prenatal care, the physician may neglect his part of the contract. If the patient pays as she goes, she is often the one to delay, or to feel that she is being unduly charged for a routine service which some friend's doctor renders for nothing.

Some doctors charge for the initial examination at the office; others do not. These examinations vary greatly as to their completeness. Good standard prenatal care is provided for the free clinic mother. This method is familiar to students and doctors who have been in medical school during the last ten years.

A few suggestions regarding a method of prenatal care includes three divisions: history, examination, and items to be noted on succeeding prenatal visits.

HISTORY

The history is just as important in an obstetrical patient as any other patient, but in the obstetrical case especial attention should be given to the obstetrical part of the history. The history of each previous pregnancy should answer the following questions: The year; the sex; birth weight; was

it born alive, and if not, why not; was it a normal delivery; was there a feeding problem; was the delivery at home or in the hospital; who was the attending physician? This type of questioning often brings out an amazing amount of useful information, and it gives the physician an idea of previous conditions and a basis upon which to estimate the character expected in the present pregnancy and labor.

To the general examination is added the careful pelvic search for abnormalities and their recording, with a written note on prognosis. At regular return visits, eleven questions routinely investigated will signal most all the ordinary pitfalls of pregnancy. Is the urine normal? What is the blood pressure? What is the gain in weight? Is there edema? Is there indigestion? Is there headache? Is there pain anywhere? Any bleeding, however slight, should be noted. Is there constipation? Is there any disturbance of sleep? What is the location and condition of the baby? Excepting the urinalysis, all these leads can be covered easily in five minutes. The urinalysis can be included in the time mentioned above in case the general practioner takes advantage of the sink test. This laboratory procedure is said to be both rapid and conclusive.

FEES

The fee for obstetrics at time of delivery is usually as much as the patient will promise to pay. No two communities appear to have anything near a standard fee arrangement. In this city and county, this varies much among the practitioners and more widely among those who are specialists in obstetrics. Postpartum care for mother and baby usually extends over a two weeks period with a small but increasing per cent returning for the very important six weeks postpartum examination. This care has a variation from release from responsibility for the baby as soon as the cord is cut, to the other extreme of a one-year service to both mother and baby included in the one obstetrical fee. I once had the experience of being called by a mother to attend a seven months old baby. Upon my arrival the mother apologized for calling me, as she had yet five months service to come from her obstetrician who had included a year's service to her and the baby in his obstetrical fee. Thus had the medico gone one better than the automobile salesman, for his promise of a year's service never included the old car with the new.

Why is it that obstetrics in the general practice of medicine does not render a percentage of pay in proportion to the rest of the doctor's practice?

The first born usually arrives while the couple is young; they are not established in business or, if employed, they still are low in the scale of income. Most every young couple is obligated by payment plans and the budget has no item for offspring. This does not apply alone to the people of limited means; even the sons and daughters of the wealthy are usually given their child-bearing period to struggle with life's economic problems without the use of funds from inheritance until their families are well on the way to maturity. Couples with limited means and with every item budgeted, the fee for the doctor included, arrange for minimum hospital accommodations. All is well until the doors of the hospital are entered, when ideas of grandeur possess them. Instead of the perfectly sensible plan, there develops before they are settled a desire for the best room, a special nurse, long distance telephone calls, and flowers from dad to mother. Extra hospital days "just to be safe" are added after the doctor's permission is given to leave. The wise general practitioner knows when he sees this set-up that he will most likely wait for his fee.

Every physician, no matter what his age, can vividly recall his first obstetrical case. It is unusual to find a senior student whose enthusiasm is not aroused by his obstetrical experience. Early in general practice the physician is delighted in watching his obstetrical service grow. His ardor wanes with experience when he finds many factors appear to entice him into other fields of endeavor.

There's a lure in the snap of the tonsil snare; a lucrative buzz in high frequency; the financial thrill in the touch of a fibroid is three times the feel of a fetus; there's enchantment in even the mumured lullaby sung by a mitral valve. There's aversion to hasty departure from bridge table, Bacchus and bed.

These and other influences combine with the uncertainty of obstetrical fees are the reasons for many a good man leaving the obstetrical work to others of his profession or allowing it to drift away to the clinics.

In spite of all this, there is left in the field of obstetrics a sizable group of general practitioners and specialists to whom obstetrics has its appeal. They do make it pay. They attend to the task with alertness and show remarkable skill. They deserve, and receive, great credit from the rest of the medical profession.

A confidential survey was made of all obstetrics done in the metropolitan area consisting of Indianapolis and Marion County. This was accomplished with the permission of the Bureau of Vital Statistics of the State Department of Health.

The following facts were obtained by a search of each birth return filed for the year 1932: Home address and economic status: Outside of Marion County, delivered in Indianapolis, charity 67%; private 33%. Marion County Area (outside of Indianapolis), charity 28%; private 72%. Indianapolis—charity 43%; private 57%.

The high percentage of charity as given is far from complete as no account was taken of the distribution of cases among physicians by the various

township trustees throughout the county. These were classified as private because the physicians were supposed to receive some compensation. It is also impossible to separate cases delivered by doctors as private charity.

An idea of this problem in general practice may be gained from the fact that a complete tabulation was made of the writer's own obstetrical work for ten years beginning with January 1, 1922, ending December 31, 1931. The source of this obstetrical material was as follows: 25% farmers; 25% residents of Indianapolis; the remaining 50% lived outside of Indianapolis but were not farmers.

Most all of these patients received prenatal care. Of those receiving prenatal care, the majority paid for the service when it was received.

The following percentages are based on obstetrical deliveries only: Beginning with 1922, the number of cases paid to date is given respectively for each year in per cent: 89%, 80%, 78%, 75%, 69%, 57%, 64%, 68%, 61%; average for ten years, 71.8%.

The average yearly collection based on the whole of a general practice was each year after 1926 much higher than shown by the obstetrical percentage.

As this paper considers obstetrics in relation to the general practitioner, the following table excludes the cases of a group of ten obstetrical specialists.

It is of interest to note that but one case in the survey was delivered by a midwife.

Three osteopaths delivered a total of twenty cases.

Three hundred thirty-seven general practioners delivered 2,872 private cases in Indianapolis distributed as follows:

82 delivered one case.
38 delivered two cases.
26 delivered three cases.
20 delivered four cases.
162 delivered from 5 to 40 cases.
9 delivered from 40 to 75 cases.
Hospitalization of private cases was as follows:
Marion County, hospital 20%, home 80%.
Indianapolis, hospital 43%, home 57%.

No account can be given in such a survey of the many duplications of services to the various cases, such as consultations during pregnancy, labor, and puerperium.

Abortions and miscarriages are not recorded in Indiana, and at birth but one man signs the birth certificate. Many physicians may have been consulted in the case.

A study of this survey as given furnishes material for serious consideration from many different angles.

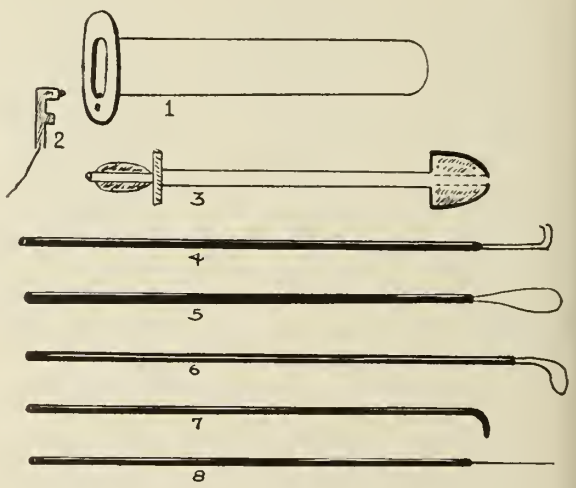
4730 West 72nd St.

TRANSPROCTOSCOPIC RESECTION OF RECTAL CARCINOMA

(CASE REPORT)

NOAH ZEHR, M. D.
FORT WAYNE

HISTORY: Male, aged seventy-six years; weight 152 pounds; height, five feet, four inches; good physical condition. Had suprapubic prostatectomy fifteen years ago, and had mastoidectomy complicated with permanent facial paralysis of right side of face twenty years ago. Occupation, retired printer.



1. Bakelite proctoscope sheath.
2. Light.
3. Perforated obturator.
4. Retractor.
5. Straight cutting loop.
6. Cutting loop hoe.
7. Coagulating terminal-surface.
8. Coagulating terminal-submucous.

PRESENT ILLNESS: In December, 1934, the patient complained of bloody stools, somewhat irregular bowel movements, but without pain. No loss of weight or appetite was reported, and he felt generally good.

EXAMINATIONS: Disclosed no palpable mass in abdomen. No pain.

RECTAL EXAMINATIONS: No hemorrhoids or fissure found. Examination with the six-inch proctoscope revealed blood coming from a higher level. Nothing abnormal was found from this level of the rectum downward.

In February, 1935, barium enema x-ray showed a mass and irregular shadow at the lower level of the sigmoid colon, with a definite narrowing of the

lumen. X-ray repeated in April showed some advance in growth of pathology and slightly more narrowing of the sigmoid. Blood and mucus in the stools continued. In the latter part of April, 1935, the patient was referred to a proctologist for further study, and sigmoidoscopic examination showed a napkin-ring constriction about seven or eight inches up the recto-sigmoid tract. The proctologist reported a napkin-ring carcinoma in the lower third of the sigmoid, which bled freely when manipulated through the proctoscope.

The patient refused colostomy. Transproctoscopic electro-surgical treatment was suggested and accepted. Therefore, the electrode terminals for work beyond an eight-inch proctoscope were made. These consisted of retractors,[1] fine wire cutting loops, surface and submucous coagulation, and illuminated bakelite proctoscopic sheath, using a light from a Young endoscope.

On May 20, 1935, with the patient in a knee-chest position, the growth was visualized through the proctoscope. Four nodules were removed with the cutting current. The last dropped from sight into the lumen of the bowel beyond the proctoscope. Our resection made an opening as large as the proctoscope through the napkin-ring constriction. There was a small amount of bleeding which was stopped by coagulating the surface rather deeply. A needle-like coagulation terminal was inserted into the remaining nodules and coagulated. We tried not to do too much cutting and coagulating. No anesthetic of any kind was used.

Following this procedure, the patient got off the table, said that he had no pain but felt that his bowels were going to move. He passed a slightly bloody stool at the office, then walked home (about five blocks), and two hours later had a copious bowel movement. Six days following the operative work, he walked to my office, a distance of twenty blocks. He had spent no time in bed after the resection, he had no increase in bleeding, and he had had good bowel function. On June seventh, eighteen days after the resection, he reported a diminished amount of bleeding and said that he had been doing his usual work around the boarding house.

Conclusion: This case is reported because it is believed that early transproctoscopic resection of lower bowel carcinoma is practical and most likely ambulatory. We will continue with interval resections either to cure or to palliate.

301 W. Creighton Ave.

[1] Zehr, N., Submucous Coagulation of Hemorrhoids. *Archives of Physical Therapy, X-ray, Radium*, Sept., 1934, Vol. xv, pp. 556-557.

MYTHS IN MEDICINE*

HENRY S. LEONARD, M. D.
INDIANAPOLIS

The definition of the word myth in its relation to medicine is a "something existing only in the imagination or where actual proof of existence is lacking." Just where and when these myths originated would be hard to determine, for they seem to have had their birth in remote antiquity. Long before science was ever thought of, amulets (protective charms) were used to ward off disease and these probably represented an important stage in the development of medicine as a science.

It was by the study of medical amulets inscribed with mystic sentences, words, or characters, that we were able to acquire definite knowledge of the people who used them. From the very earliest time it has been man's nature to believe in something, to ascribe to some image, fashioned out of metal, stone, wood, or ivory, supernatural powers for the protection of the individual, for in these images there was supposed to be an indwelling spirit that had the power to help the possessor. Grecian athletes wore protective charms to combat or counterbalance the magical devices of their opponents. Failure of the charm to do this was not attributed to its lack of power, but to a mistake in the method of preparation.

Lawrence states that "according to an old Shamanic belief, which was the primeval religion, every physical ailment is caused by a little devil which enters the body and can be expelled therefrom only by means of magic." In ancient Chaldea medicine was considered a mere branch of magic.

Traces of the above doctrine have come down through the centuries and even today disease is considered by some to be the work of the devil. Demonology was accepted by the early Christians who wore amulets as a remedy against disease in spite of the condemnation of the church. In Alexandria it was a custom for a person, ailing from any cause, to write certain characters on paper, or metal, and to fasten the amulet, thus improvised, upon the part of the body affected. Medieval astrology was used to promote the wearing of amulets, and magic was used as an aid in medicine. A Roman writer is said to have recommended the placing of the fourth book of the Iliad under the head of the patient suffering with malaria.

Consulting the stars for prognosis was common.

A medical written charm, wholly unintelligible, was considered very potent. The writing of unreadable prescriptions is common to this day! Amulets and charms depended for their efficacy upon being symbolic of an inner mental state.

Literature is full of references to precious stones, pieces of metal, parchment, and mystic words which were used as talismans. In medieval times they were generally used as remedies, and

* Presidential address, presented before the Indianapolis Medical Society at the annual meeting, January 8, 1935.

great was the belief in written or spoken words as healing measures. The drinking of water to wash off the names of drugs, written on paper or board, was considered very potent.

The story of the human race and its credulity is that of the children of Isreal being led out of bondage. Times innumerable they were shown divine guidance and favor; time after time they were punished for infractions of laws, yet no sooner were the backs of the leaders turned than they began to fashion images and to worship them even though experience and reason should have taught them better. Perhaps the predisposition always to want to be humbugged is inherent in the human race.

In antiquity, mythology was rampant, there were gods and goddesses for everything, and their power was unlimited. Ancients attributed diseases to the anger of the gods. If heredity is any factor, is it any wonder that our beliefs today are tinged with superstition and ignorance?

Many of the myths that are to be mentioned are common to one century, or more, while others are common to all.

SPECIFIC MYTHS

The exposure of a cure in one generation does not prevent the cure's reappearance in another form in a succeeding generation.

In enumerating the many false convictions of the centuries past, we will be amused and perhaps inclined to pity the beliefs of our ancestors, in the light of our present knowledge, but we must remember that the therapeutics of our generation will seem absurd to the next generation.

There was a time when moss scraped from a dead man's skull (especially a criminal), was considered a very effective remedy. Ground up mummy was used as a prescription up until the middle of the 18th century.

Mandrake, gathered in the dark of the moon, from a graveyard, was thought to possess great therapeutic value.

Touching a piece of rope which had been used to hang a criminal, was considered a powerful curative agent.

It has been (and still is), a common belief that illnesses are related to phases of the moon. For instance, children, born at full moon, are apt to be strong. Cholera, in India, was thought to come with a change of the moon. Insanity was caused by allowing rays of the moon to shine directly on the face during sleep. The word "loony" was originated from this belief

Night air long was thought to be a cause of disease.

Warts could be removed by tying a string into knots and burying the string at the cross-roads in the moonlight.

Madstones were considered a cure for hydrophobia.

Prenatal influence was (and still is), thought to produce birth marks, hair-lips, and dog face. Fear for offspring was expressed if expectant mother was scared by a windmill. (This fright may be the explanation for so many gesticulating political orators!) Listening to a symphony orchestra was expected to produce a Beethoven and looking at a beautiful picture was supposed to produce a beautiful child.

In the treatment of common colds, asafoetida, sewn up in a sack and suspended from the neck, was thought to be curative.

Chaining a skunk to the kitchen stove was a very potent remedy.

Goiter was treated by drawing a snake nine times across the neck of the patient, or by hanging about the neck the skin of the snake sewn on silk.

Rattlesnake oil has been used for years, and was considered a panacea for all joint and muscular pains.

There are myths about snake eggs developing in the human stomach which has also been alleged to be the dwelling place of lizards, fish, frogs, and even the octopus.

Appendicitis long has been attributed to grape seeds and to worms which clog the lumen.

Boils and pimples were regarded as a sign of "meanness" coming out, or of the blood purifying itself. Perhaps this idea was responsible for the use of blisters and leeches to draw out poisonous material.

The removal of tonsils was thought to interfere with speech, spoil the singing voice, and ruin procreative power.

The cutting of a baby's hair was expected to weaken the child.

Playing with matches was productive of enuresis nocturna.

If your right ear burned, something good was being said about you; if the left burned, somebody was saying uncomplimentary things.

If prospective mothers slept on the right side, the baby would be a boy; if on the left side, the baby would be a girl.

Hindu doctors are responsible for the statement that if the right eye of a mother is larger than the left, the baby will be a boy.

Bear grease, rubbed on the scalp, prevented baldness. The singeing of hair was done to prevent sap running out! A loss of hair was a sign of declining health.

A stye was cured by rubbing it with a tomcat's tail or by the application of a wedding ring.

Carrying a buckeye or a horsechestnut in the trousers pocket was (and is), a remedy for rheumatism.

Looking directly at the sun was considered to be a way to strengthen the eyes. Another way was by exercise. Cold water was regarded as a cure for inflamed eyes. An ancient treatment for sore eyes was the urine of infants.

Sewer gas was long regarded as the cause of typhoid fever.

Touching a toad was productive of warts.

Another belief that holds true to this day is that unless a medicine possesses a bad odor and a horrid taste it is ineffective.

The playing of musical instruments was thought to be injurious to health.

Saliva was considered a cure for warts and ring worms, also neuralgia and headache, provided the forehead was expectorated upon by a witch doctor.

Toothache was believed to be caused by a worm. Extraction of the tooth with the nerve or pulp showing on the root tended to verify the belief. Dried angle worms, smoked in a pipe, were considered a remedy for toothache. Another remedy was to drive a nail into an oak tree. Headache likewise could be cured by drawing out a nail that had been driven into hard wood.

Electric belts and pads, metals in the form of discs, sewed up in chamois or other leather and worn next to the skin, producing streams of electricity, were later cures for rheumatism. Electric metal batteries, composed of a series of discs made of copper and zinc, were also used. Electric rings, worn on the left hand, to draw out disease, and electric insoles, one composed of copper and the other of zinc, were considered highly curative.

Many are the myths concerning our food: Fish is still looked upon as a brain food because of its phosphorus content. Mixed foods, such as lobster and cream, strawberries and cream, pickles and peaches, fish and tea, were thought to be certain poison. The idea that eating raw meat makes men savage exists even today. Another belief was that cucumbers were poisonous, and that the eating of white bread was the cause of cancer.

Magnets were popular about the middle of the eighteenth century in the treatment of disease. They were often shaped to represent the organs to be treated and were applied directly over the organ affected. They were more effective when applied after the patient had made peace with his conscience and his God.

Lord Bacon, during his lifetime, sponsored a weapon ointment, and the most distinguished men in Europe subscribed to its effectiveness. This ointment was not applied to the wound, but to the weapon causing the wound; it was made up of many ingredients, which were brought from great distances, and which were hard to secure. This myth illustrates how the father of modern science could be duped.

A "sympathetic powder" came in the next generation, and was even more famous, as a cure, than the weapon ointment, for it was more easily prepared and used. It was taken up by physicians, as the weapon ointment was by surgeons.

Who remembers the old chest protectors that were considered so effective? Red flannel was thought to be very efficient in treating anemia and rheumatism. Colored articles of clothing were supposed to produce corresponding effects in the system.

Many peculiar notions concerning anatomy existed for many centuries. For instance, the Greeks looked upon the brain as a soggy mass which supplied moisture to the eyes and nose. They, in common with many others, thought that the heart was the center of feeling and of thought. The Babylonians, along with the other ancients, believed that the liver was the seat of the human intellect. The earliest attempts to connect the mind with some bodily organ located it in the liver. Later, ancients attempted to locate various intellectual processes in various physical organs; they regarded the heart as the seat of the soul and as possessed of spiritual faculties. All tender and compassionate emotions were thought to be located in the bowels, just where fortitude is looked for today!

It is interesting as well as amusing to read medical books published one hundred years ago concerning the causation and treatment of disease. Knowing nothing of the causation of jaundice, the physicians resorted to bleeding, followed by an emetic. Dropsy was ascribed to obstruction of perspiration, or the prevention of the blood in being duly prepared. Gout was thought to be due to idleness and intemperance as well as intense study. Scurvy was a disease which afflicted people with sedentary habits and who possessed melancholy dispositions. Scrofula was considered an hereditary taint—a disease in children induced by allowing them to continue long wet. Apoplexy was caused by compression of the brain, occasioned by excess of blood or a collection of watery humor, and for this no one treatment had the vogue that did bleeding. Bleeding was the one thing indicated in every kind of ailment—from the most trivial to the gravest.

Another of our later day myths was that of rejuvenation by gland transplantation. All that was accomplished in the attempt to make an old man young was to ruin the future of some perfectly good goat or monkey. Many extracts of glands have been put on the market in recent years, and great claims have been made for them, only to be, in the main, discarded. Thousands of drugs have been used confidently by physicians with like results. During and after Harvey's time there was a shot-gun remedy known as "theriac." It was popular for several centuries, and was as old as Galen if not older. It had more ingredients in it than there are days of the month, and it was considered a cure-all. Following the use of "theriac," purgatives became popular, and for nearly five centuries antimony was the favorite remedy; unless a patient received it when ill, his chances for recovery were slim. Calomel was the successor to antimony in popularity, and after the mystery concerning its action became known, its use diminished.

One of the very amusing things in the use of drugs was Bishop Berkeley's tar water, which was made by stirring a quart of tar in a gallon of

water and allowing the non-mixture to stand for forty-eight hours, then pouring off the clear water. Drinking this water cured all diseases of male and female. The Bishop was reputed to have been the best educated and most fastidious man of his time, but this fact was no bar to his belief in the efficacy of his tar water.

Later, "smell" cures were the fashion: asafoetida and valerian are examples.

After the exposé by Claude Bernard, the famous French physiologist, of the fallacy of calomel and venesection, the reign of sarsaparilla began. In its turn, it cured all bodily ailments. Hundreds of thousands of dollars were expended in advertising this drug and vast returns were realized in sales.

Following sarsaparilla came the whisky tonics. Many were the testimonials as to their efficiency. Ministers, priests, nuns, and W. C. T. U workers permitted their names to be used in advertising.

About this time special attention was given to diseases of women, and "Peruna" cured them.

Men then came in for their share of notice and "lithia" was the universal specific.

As far back as any record shows, and in nearly every age, some man has presented himself and confidently announced that he was the possessor of healing power. In later years almost all medical superstition seems to have crystallized itself into numerous mind cures, all operating along like lines. There is the same willingness on the part of the people to be deceived and misled now that existed in the days of our forefathers.

During the time of Edward the Confessor, King's evil (scrofula) was cured by the touch of kings. This influence of mind over matter held until Cromwell's time, when he refused to have anything to do with it.

It would be reasonable to suppose after Harvey's discovery of the circulation of the blood, which discovery was thought to be the scientific foundation of modern clinical medicine, that myths of an earlier day would have been explained and set aside, but no such thing happened. If possible, delusions were greater than ever. In fact, the next century produced the most famous healer in all English countries, a type common to all time, Valentine Greatrakes. He was an Irishman of English descent. He not only cured King's evil, but all other ailments. His claim was that he had been divinely commissioned by the Holy Ghost to touch sufferers and, by so doing, cure them. Even doctors and divines attested to this. The basis of his theory was that, since all diseases are caused by possession of the devil, all that was necessary to cure was to remove the devil. Not so long ago, we had a parallel to Greatrakes in Alexander Dowie. From a pastorate in Australia he came to the United States and settled near Chicago, and announced that he was the prophet Elijah returned to earth to heal mankind; his, also, was the touch method. In other words, disease and injury are mental, but the fee is always material. Possibly no greater field for such a prophet to work could have been found than near Chicago, where so many seem to be possessed of devils!

About a hundred years ago a chap by the name of Mesmer originated a new type of healing. He was a medical student in Vienna with a flair for making money. Constructing a battery, he attached to it many wires; patients were put in contact with these wires and with each other; electricity was supposed to flow out through the patients and it, together with the great personality of Mesmer, cured thousands. Later on Mesmer's name became associated with Mesmerism, and in the nineteenth century it was called hypnotism.

In our own country, at the end of the eighteenth century, Dr. Elisha Perkins, a Yale graduate, invented a set of tractors made up of fused metals. These were placed on a patient, in contact with each other, and drawn over the skin surface. Remarkable cures resulted.

Another charlatan in our own country was Andrew Jackson Davis, the seer of Poughkeepsie. In his treatment there was a tincture of religion and spiritualism. He claimed celestial wisdom, and for healing purposes he was given special favors by the Almighty as well as instruction by the appearance of Galen and Swedenborg.

Hypnotism, considered the world's greatest discovery, was looked upon as an intelligent solution of all physical ills. By it criminals were to be reformed and morals improved. Du Maurier's "Trilby" was an example of its effects.

Another craze was that of blue glass. Light shining through blue grass, on the patient, was thought to cure all diseases.

Next came the manipulation treatment, whereby rubbing or stroking the body toward the extremities would relieve the sufferer of his infirmities. For a present example we may look to Dr. Locke of Canada. This type of magnetism possibly gave Dr. Quimby his idea.

Bone setters or joint adjusters, dislocation or subluxation experts, represented another class of predatory animals. Since they were able to recognize bones that were out of joint, even though unrecognizable by x-ray, all sorts of ills were cured. They paved the way for the osteopath and the chiropractor.

Another of our present day mystics was Francis Schlatter, known as the "hermit faster." He claimed to have been commissioned by the Most High to come down from the mountain of the Holy Cross to cure thousands about Denver. His technique was the same as Dowie's.

Spiritualism is another belief that depends upon great physicians of the spirit world to send messages of healing.

Psychoanalysis is another myth that finds all neurotic ills due to sex repression. It is a product of the twentieth century and has caught the fancy of the intelligentsia.

Space does not permit more than mention of many of the myths that are familiar to us all of the present day, such as Quimbyism, Couéism, Christian Science, osteopathy, chiropractic, "New Thought," and many others. All of these mythical beliefs and cures were not peculiar to the weak-minded and ignorant, nor to the common people. The percentage of the highly educated and well informed persons who have accepted these beliefs has been, and is, high. Distinguished scientists, ministers, lawyers, professors, and even famous medical men have been led into believing these myths. People do not like actualities, they like illusions.

There seems to be a psychic contagion that affects the great mass of humanity—for humanity hasn't changed down through the ages in spite of evolution and progress.

A GENERAL CONSIDERATION OF SCIATICA*

F. S. DOWNEY, M. D.
DILLSBORO, INDIANA

INTRODUCTION

Several years ago it was my privilege to be placed in a position where I came in contact with a rather large number of cases of so-called "sciatica." It was soon apparent that my knowledge was insufficient to deal with these cases adequately, and that many of my medical confreres were in the same state. Text-books dealt with the subject quite inadequately. No single paper published attempted to cover the subject completely. Hence, the following study of the modern literature of sciatica was made primarily for my own instruction.

DEFINITION

"Sciatica" refers to the syndrome of pain radiating in the area of distribution of the sciatic nerve. It is not a disease entity, but is a symptom, and may be due to any of several different diseases or conditions. However, it must be remembered that all pains of the low back, hips, and legs are not sciaticas. Myalgias are often so misdiagnosed, as are also arthritides of the hips, knees, and ankles. Too often the name "sciatica" is loosely given when careful examination would reveal the correct pathology.

ETIOLOGY

The sciatic nerve with its branches, the common peroneal and the tibial, is the longest nerve of the body. At every point, throughout its lengthy course, it is in danger of injury or affection by neighboring organs and structures. If we start at its origin in the cord, and consider, in a downward course, the different conditions which may cause pain along the nerve, we will be amazed by the great number and variety of these conditions. (See figure 1.)

At the origin of the posterior root, in the cord, may occur the radiculitis of tabes; in the ganglion on the posterior root, the inflammation of herpes. At the cauda equina, the nerve roots are

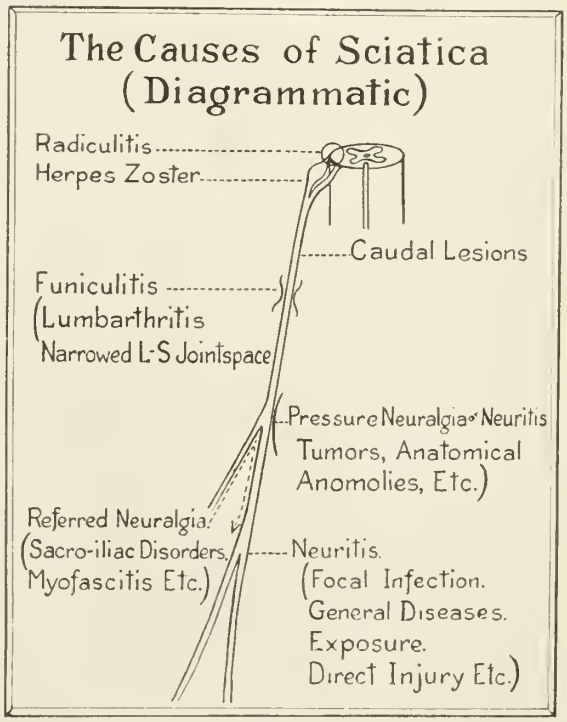


Fig. 1.

subject to pressure or irritation from neoplasm of the cord, sacrum, or vertebral bodies. At the intervertebral foramen, arthritis or other processes narrowing the canal may affect the nerve. In the pelvis, tumors of the pelvis or pelvic organs, uterine displacements, constipation, and affections of the pyriformis muscle may be causative of trouble. Here also, a diseased sacroiliac joint or a gluteal myofascitis may send a referred neuralgia down the nerve. The nerve trunk itself may be the seat of neuritis secondary to general disease, or be subject to direct injury from external violence. Hence, in studying any case of sciatica, we must bear in mind the fact that the symptoms are usually not distinctive, but may be secondary to pathology anywhere along the nerve.

Sciaticas were formerly classified as primary or idiopathic, and secondary or symptomatic, with the majority of cases, because of a lack of apparent cause, considered to be primary. It is now known that sciatica is practically always secondary.

Sciaticas may be divided conveniently into two groups (Fig. II) depending upon whether the causative factors act on the nerve internally or externally. The first group, in which the nerve is affected internally, includes those cases due to

* Presented before the Fourth District Medical Society at the thirty-first annual meeting, Rising Sun, May 16, 1935.

exposure, direct violence, herpes zoster, general disease, focal infection, and the rare cases resulting from lead, arsenic, and alcohol, and is known as "intrinsic" sciatica. It is generally in the form of a neuritis, but may be neuralgic in the early stages. Of the general diseases, diabetes is the most commonly causative, with syphilis and malaria occasionally being so. However, intrinsic cases, on the whole, seem to be less common than the extrinsic. McKinnon[1] writes that he has never seen a case secondary to syphilis or diabetes, and Feiling,[2] in his Hunterian oration, states that he has never seen a single case in which removal of a focus of infection was beneficial. Lest this appear to minimize the importance of infectious foci in sciatica, it might be stated that in many cases there probably is an intervening factor such as myofascitis or arthritis, which affects the nerve extrinsically, while being itself aggravated by the present focus of infection.

"Extrinsic" sciatica, in which the nerve is affected externally, is divided into two groups, the referred and the pressure cases. The referred cases are the true neuralgias, with the pain referred from trouble elsewhere such as sacro-iliac disease, gluteal myofascitis, and more rarely, gluteal and trochanteric bursitis, and prostatic malignancy. Recently, Ober[3] has reported ilio-tibial band contracture as a cause of sciatica. Da Costa cites three cases of obstinate sciatica which were cured by the removal of diseased retrocecal appendices.

Pressure cases are those in which direct irritation of the nerve is the cause of symptoms. These are divided further into a general miscellaneous group and a rheumatic group. In the general group are included those cases due to pressure of neoplasms, uterine tumors or displacements, spondylolisthesis, constipation, anatomical anomalies such as long transverse process of the fifth lumbar vertebra, and inflammatory, vascular, or degenerative disease of the spine, pelvis, or cord.

The rheumatic group includes arthritis of the lumbar spine, affections of the lumbo-sacral joint, the pyriformis muscle and possibly of the sacro-iliac joint. By far the greater number of cases formerly classed as idiopathic are now known to fall in this rheumatic group.

The importance of lumbarthritis in causing sciatica was demonstrated by Danforth and Wilson[4] in 1925, and by Putti[5] in 1927. The former called attention to the fact that two considerations point to the fifth lumbar nerve as being the one chiefly at fault in many cases of "idiopathic" sciatica. These are (1) that the pain in sciatica usually follows the cutaneous distribution of the fifth lumbar rather than that of any other spinal nerve, and (2) that study of the reflexes also incriminates the same nerve. Of the three reflexes of the lower extremity, the patellar, Achilles, and plantar, the Achilles is practically the only one affected in sciatica, and has its spinal center at the level of the fourth and fifth lumbar, whereas that of the patellar is third and fourth lumbar, and the plantar, first and second sacral. The same authors call attention to the anatomical disproportion existing between the fifth lumbar root and its intervertebral foramen. This disproportion is so marked that the nerve is in great danger of compression by any process causing a slight narrowing of its foramen.

Putti contended that, whereas we had long recognized that many neuralgias, such as trigeminal and facial, were the results of irritation in their bony foramina, we had been slow to recognize that the same conditions could exist relative to the sciatic nerve. He explained that the list noted in this type of case, being away from the side of the pain, is an attempt to relieve the pain by widening the intervertebral foramen on that side. Thus lumbarthritis came to be recognized as a frequent cause of sciatica, and the resultant nerve irritation known as a "funiculitis."

In a somewhat similar condition, reported by Ayers[6] in 1929, and by Williams[7] in 1932, the narrowing of the spinal foramen and resultant nerve irritation is due to narrowed lumbosacral joint space, from traumatic rupture of the nucleus pulposus. Cases of this type, seen early, complained of backache only, whereas those which had been present for some time were accompanied by arthritic changes, and were associated with symptoms of sciatica.

According to Smith-Peterson, quoted by McKinnon,[1] the sciatic pain associated with sacro-iliac disease is a referred pain, a reflex neuralgia. Freiberg and Vinke,[8] however, have advanced another explanation as follows: the pyriformis muscle is the only muscle bridging the sacro-iliac joint, taking its origin from the capsule of this joint, and the adjacent surface of the sacrum, being inserted in the great tuberosity of the femur. The protective spasm of this muscle, present in disease of the sacro-iliac joint, is believed to cause sciatica by direct irritation of the nerve, because of their close anatomical relationship.

These authors also believe that the sciatica associated with myofascitis is due to a similar mechanism, the pyriformis being spastic in this instance, from the myofascitic process. However, a different explanation is given by Burt,[9] who be-

[1] McKinnon, A. P.: Sciatica. *Can. M. Assn. J.* 22:492, April, 1930.

[2] Feiling, A.: Sciatica. *Brit. Med. J.*, March 10, 1928, p. 386.

[3] Ober, F. R.: Back Strain and Sciatica. *J. A. M. A.* 104:1580, May 4, 1935.

[4] Danforth, M. S. and Wilson, P. D.: The Anatomy of the Lumbo-Sacral Region in Relation to Sciatic Pain. *J. B. and J. Surg.* 7:109, January, 1935.

[5] Putti, Prof. V.: New Conceptions in the Pathogenesis of Sciatic Pain. *The Lancet* 213:5419, July 9, 1927.

[6] Ayers, C. E.: Lumbo-Sacral Backache. *New Eng. J. of Med.* 200:592, 1929.

[7] Williams, P. C.: Reduced Lumbo-Sacral Joint Space. *J. A. M. A.* 99:1677, November 12, 1932.

[8] Freiberg, A. H. and Vinke, T. H.: Sciatica and the Sacro-Iliac Joint. *J. B. and J. Surg.* 16:126, January, 1934.

[9] Burt, J. B.: The Diagnosis and Treatment of Sciatica. *Clin. Journal* 64:62, February, 1935.

lieves that such sciaticas are truly referred. According to him, the gluteus minimus and medius are covered by a firm aponeurosis, and any swelling of these muscles, under this aponeurosis, presses the superior gluteal branch of the sciatic against the ilium causing irritation and pain referred to the sciatic trunk.

It may seem that I have dwelt unduly long on the extrinsic sciaticas, but it is essential that these simple anatomical explanations be understood, particularly so, since the great majority of sciaticas are due to one or another of but four causes, lumbarthritis, sacro-iliac or lumbo-sacral disease, or myofascitis.

SYMPTOMATOLOGY

The symptomatology needs little discussion. The onset may be gradual or sudden. It may follow trauma, such as a twist or strain, or may be insidious, with no apparent cause. In the history the following points should be emphasized: the nature of the onset, location of the pain, factors which influence the pain, disturbances of sensation, disturbances of bowel and bladder function, previous rheumatic history, and occupation.

The pain typically follows the distribution of the fifth lumbar and first and second sacral nerves, that is, down the back of the thigh, around the head of the fibula, into the calf, the outer side of the foot and ankle. Variations of this are of course seen, depending upon the root or roots involved. Pain elsewhere is not sciatica and should not be so diagnosed. Assuming the pain to be that of typical sciatica, we have not completed our work until the causal pathology is determined, and for this the physical examination is of prime importance.

EXAMINATION

A general examination should first be done to locate infective foci, or any general disease that might be causative. Then a careful local examination is imperative. This begins with the patient standing, preferably stripped. A careful inspection comes first, by which the patient's body type, any list, lordosis, flattening, limitation of spinal mobility, muscular wasting, oedema, or ulceration is noted.

The patient is next placed recumbent on a low couch. Muscular spasm, tender areas, masses, and areas of disturbed sensation on the anterior aspect of the leg are noted. The special tests of Lasegue, Mennell, Patrick, and Gaenslen are then made. The patient is then turned face downward, and the same search for muscular spasms, tender areas, and masses made over the low back, hips, and legs. The condition of the reflexes is then determined, particularly of the Achilles. The physical examination is completed by either a rectal or vaginal pelvic examination.

Of the laboratory examinations, a urinalysis is indicated, particularly for the detection of glycosuria. An anterior-posterior stereoscopic and a lateral x-ray should be done in most cases.

DISCUSSION

A bare outline of the physical examination having been given, a discussion is necessary, that its diagnostic features may be understood.

The slender, asthenic individual is prone to sacro-iliac disorders; the stocky, sthenic type to disorders of the lumbo-sacral joints. Spinal list away from the side of pain suggests sacro-iliac disease or lumbarthritis; toward the side of the pain indicates neuritis. In sacro-iliac disease the pelvis is tipped away from the affected side, with a compensatory scoliosis, the same relationship persisting with the patient sitting. Lordosis may indicate lumbosacral disease or spondylolisthesis, whereas flattening suggests sacro-iliac troubles. Rigidity of the lumbar spine points to lumbarthritis. Tenderness along the lateral aspect of the lumbar vertebrae, and distribution of pain to the external cutaneous nerve (L iii) as well as the sciatic (L v etc.), substantiates this diagnosis.

Muscular spasm may indicate a protective splinting, or that the pathology is resident in the muscles. Tenderness may be found limited to the muscles, indicating a myofascitis; or along the nerve trunk, suggestive of a neuritis. According to Ober,[3] when the ilio-tibial band is in a state of contracture, it can be felt to stand out, cord-like and quite rigid, just in front of the great trochanter. The presence of abnormal masses should always arouse suspicion of neoplasm.

Several special tests are of value in the differential diagnosis. Lasegue's test is made with the patient supine, and consists of flexion of the hip with extension of the knee. The test is positive; that is, the knee extension is painful in true neuritis, in sacro-iliac lesions, and in some cases of myofascitis. Mennell's test serves to distinguish these. It consists of flexion of the straight leg till pain is produced, then dorsi-flexion of the foot. This aggravates the pain in neuritis, but not in sacro-iliac disorders or myofascitis.

Patrick's test consists of placing the external malleolus of the affected leg on the patella of the opposite knee, then lowering the knee of the affected leg, which procedure, when painful, strongly suggests hip disease.

Gaenslen's test consists of sharp flexion of the well leg on the abdomen with the knee flexed, and hyperextension of the affected leg over the edge of the table. According to the author, when sacro-iliac disease is present, pain will be produced in the affected joint by this test, regardless of on which side the test is made.

Pain produced by forcible manual separation of the iliac bones, or by lateral compression (Erichson's sign), indicates sacro-iliac disorders, but when pain is absent, sacro-iliac disease is not necessarily ruled out. If there is any question of the existence of sacro-iliac strain, this can usually be tested by adhesive strapping. The adhesive should run from the area of Poupart's ligament around the back to the like point on the opposite

side, below the iliac crests. If strain is present the relief is immediate. Ober[9] has described a special test for ilio-tibial contracture, for which reference is made to his original article.

Pelvic examination may reveal neoplasm or uterine displacement, or tenderness in the region of the sacro-iliac joint may suggest trouble there.

By the x-ray, developmental abnormalities, neoplasms involving the bony tissues, arthritis, narrowing of the lumbo-sacral joint space, and spondylolisthesis may be revealed. However, we should remember that the pathology found by the x-ray is not necessarily the cause of the sciatica. For instance, many cases of radiologic arthritis are symptom-free. We should further remember that the diagnosis in sciatica depends principally on the physical findings, to which the x-ray serves only as a diagnostic aid.

DIAGNOSIS

A few additional points of diagnosis remain to be considered. Sciatica is usually unilateral. When bilateral, it is very suggestive of cord disease, tabes, constitutional disease, particularly diabetes, or tumor, either of the cord, sacrum, or pelvis.

Radiculitis of tabes should cause no diagnostic difficulty. In radiculitis we find the sharp, shooting, stabbing, so-called lightning pains which are considered typical. They are never unilateral, tend to be exceedingly transient, and are very apt to be scattered over a wide area. Lumbar rigidity is absent. Lymphocytosis of the spinal fluid is present, whereas in funiculitis there is an increase of spinal fluid protein (as high as .1%), without any increase in cells.

When caudal lesions are present, the pain is usually insidious in onset, and dull and aching in character.[10] [11] It may be unilateral at first, later becoming bilateral, and is uninfluenced by weather changes. The patient is more comfortable up than in bed, there is no list, and the spine is apt to be held rigid. Early symptoms referable to the bowels and bladder, particularly pain in the rectum, are prone to occur. The spinal fluid may be blocked and yellow. The x-ray may show enlargement of the vertebral canal when tumor is present. History of operation for malignancy should always arouse suspicion of spinal metastases.

The distinction between neuralgia and neuritis is usually one of degree rather than kind, but at times the differentiation is of some assistance. Williams[5] states, "Sciatica may be either a neuralgia or a neuritis, depending upon the severity and duration of the irritation." Pressure cases probably have their origin as a neuralgia, but develop neuritic signs when the primary irritation continues long enough. It is very likely that the only true neuralgias are referred. Hence, in any case of long duration, if the findings are neuralgic, we may feel assured that the pain is referred.

In neuralgia the nerve is not tender, the Achilles jerk is not lost, and the pains are in the peripheral distribution of the nerve rather than in the nerve trunk. There may be superficial hyperesthesia, but deep pressure often gives relief.

In neuritis, the opposite is true. The patient often complains of pain when sitting due to the tenderness of the nerve trunk. The Achilles jerk is diminished or lost. Paresthesias are complained of; hyperesthesia may be present early; replaced later by anesthesia. Muscular wasting, oedema, and in extreme cases ulceration may be present.

TREATMENT

To a large extent, our treatment will succeed in direct proportion to the accuracy of our diagnoses and the thoroughness with which we analyze each individual case. It is, of course, worse than useless to attempt medication, when the cause of the symptoms is an undiagnosed systemic disease, neoplasm, uterine retroversion, or similar condition. The correct diagnosis in these conditions will immediately suggest the correct treatment. However, there is a large group of cases in which the treatment, because of a common rheumatic backgrourd, will be similar.

I. *Preventive.* By this is meant the proper prolonged treatment of the many vague aches and strains of the low back, which are prone to occur weeks, months, or even years before sciatica appears. Proper treatment in these cases will probably prevent many potential sciaticas from ever occurring.

II. *Focal Infection.* Known sources of infection should be removed on general principles, but too much should not be expected from such measures, and radical surgery should be avoided. Following the suggestions of Osgood[12] and of Albee[13], the possible role of intestinal toxemia should not be overlooked.

III. *Rest* is essential. Bed-rest in all but the very mild cases is advisable. The bed should be firm, giving the body support and preventing any strain on the affected parts. A thin pad, not over 1½" thick and 5" wide, applied in the lumbar region to give the normal lumbar curve, is advantageous. When the case is severe, sandbags, splinting and supporting the leg are of value, or a low body cast may be used for a few days or weeks.

IV. *Extension* of one or both legs is at times useful to relax the spasm of ir-

[10] Elsberg, C. A. and Constable, K.: Tumors of the Cauda Equina. *Arch. Neurol. and Psych.* 23:79, January, 1930.

[11] Fletcher, E. M., Woltman, H. W., and Adson, A. W.: Sacro-Coccygeal Chordomas. *Arch. Neurol. and Psych.* 33:283, February, 1935.

[12] Osgood, R. B.: Etiologic Factors in Certain Cases of Sciatic Scoliosis. *J. B. and J. Surg.* 9:667, October, 1927.

[13] Albee, Fred H.: Myofascitis. *Am. J. of Surg.* 23:70. January, 1934.

ritated muscles. A weight of five to ten pounds is advocated, with the affected leg in about fifteen degrees of flexion, and the same amount of abduction. Extension should be intermittent at first if not well borne.

V. *Heat* in some form is usually beneficial. In the home, the electric pad, and hot wet pack, and the old-fashioned method of ironing will be most useful. In the highly acute cases, the frequent irradiation with the infra-red light often gives considerable relief. In chronic cases diathermy is indicated, with treatment directed not to the site of the pain but to the part involved, such as the spine when arthritis is present.

VI. *Medication.* During the acute stage analgesics of some kind are necessary. Church advocates thirty grains each of aspirin and sodium bicarbonate every hour for six doses, followed by smaller doses at longer intervals. If gastric irritation occurs, salicylates intravenously or per rectum will be indicated. Morphine may occasionally be found necessary, but must be employed with consideration for the chronicity of the disease. When arthritis is present, the intravenous use of colloidal sulphur may prove beneficial.

VII. *Spa-Therapy.* When home measures fail, spa-therapy often gives excellent results, but is contra-indicated in the highly acute stage. The rule of rest is easier to enforce with the patient away from home; the large quantities of water taken are beneficial in elimination and in correcting any intestinal toxemia; systematic hydrotherapy can be employed much better than at home; and, at a sulphur spa, the sulphur is probably of distinct aid in treating any arthritic process.

Hydrotherapy is begun with daily mild baths at 100°, raised in the course of a few days to 104-6°. After a day or two, hot wet packs are used, applied over the lower spine, hip, and any painful areas in the leg. When the acute stage has passed, the sub-aqueous douche, given at a temperature 10° higher than the bath, is particularly beneficial.

When myofascitis is causative, treatment is, of course, directed to the affected muscles. Packs are properly limited to these parts and not applied to the entire painful limb. Massage to the muscles is highly beneficial, best preceded by the use of the infra-red, or some other form of heat.

VIII. *Injection.* Three different methods of injection have been used with success in sciatica.

(a) Neural injections[14] are made directly into the nerve and are of value in organic lesions of the nerve trunk, the true neuritides. The injection of fifty to 100 cubic centimeters of normal saline is made at the junction of a horizontal line passing through the top of the great trochanter, and a vertical line through the margin of the tuber ischii. Great relief may follow the first injection, or a second may be required in a few days.

(b) Epidural injections[15 16 17] are of particular value in funiculitis, and also in sacro-iliac disorders. This consists of the injection into the sacral canal outside the dura, of fifty to 80 cubic centimeters of warm saline, and is followed by immediate relief in about sixty-five per cent of cases. Slot follows the injection by manipulation of the lower spine and hip joints, followed by kneading of the gluteal and lumbo-sacral muscles, and claims relief or cure in eighty per cent of his cases. Injection may be repeated in four or five days when necessary. In some cases, return of pain in six to nine months necessitates re-injection.

(c) Labat and Greene[18] have recently described a method of paravertebral injection of alcohol, from which the results have been good, but whose technique does not seem to be one adaptable to general use.

IX. *Manipulation*[19] has for its purpose the freeing of adhesions, and the restoration of mobility. It is particularly indicated in those chronic cases in which the hamstrings are quite spastic, associated, as some believe, with chronic sacro-iliac strain. In this type of case a spinal anesthetic is used and the extended leg is gradually flexed at the hip, till the knee approximates the chest. This stretching of the ham-strings is accompanied by kneading, the process requiring about thirty minutes, during which period the

[14] Thomson, F. G.: The Treatment of Pain in Lumbago and Sciatica. *The Practitioner* 133:274, September, 1934.

[15] Whitaker, Paul F.: The Treatment of Sciatica by Epidural Injection. *Va. Med. Monthly* 60:489, November, 1933.

[16] Allegretti, J. E.: Epidural and Perineural Injections. *Am. J. of Surg.* 25:304, August, 1934.

[17] Slot, G.: *The Practitioner* 785:581, November, 1933.

[18] Labat, G. and Greene, M. B.: Sciatic Neuralgia. *Am. J. of Surg.* 11:435, March, 1933.

[19] Jackson, R. H.: Chronic Sacro-Iliac Sprain with Attendant Sciatica. *Am. J. of Surg.* 14:456, May, 1934.

CLASSIFICATION OF SCIATICA (Etiologic)

- I. Intrinsic Sciatica
  - 1 Focal Infection
  - 2 General Diseases
    - a Diabetes
    - b Syphilis
    - c Malaria
  - 3 Herpes Zoster
  - 4 Exposure
  - 5 Direct Injury
  - 6 Miscellaneous Poisons
    - a Lead
    - b Arsenic
    - c Alcohol
- II. Extrinsic Sciatica
  - 1 Referred Neuralgia
    - a Sacro-iliac Disorders
    - b Gluteal Myofascitis
    - c Hip-joint Disease
    - d Glutcal and Trochanteric Bursitis
    - e Contracture of Ilio-tibial Band
    - f Visceral Disorders
      - i Prostatic Malignancy
      - ii Retro-caecal Appendicitis, etc.
  - 2 Neuralgia, and Pressure Neuritis
    - a Miscellaneous Group
      - i Neoplasms
      - ii Uterine Tumors, etc.
      - iii Spondylolisthesis
      - iv Constipation
      - v Anatomical Anomolies
      - vi Inflammatory Disease of Spine, Pelvis, and Cord
    - b Rheumatic Group
      - i Lumbarthritis
      - ii Narrowed Lumbo-sacral Joint Space
      - iii Spastic and Inflammatory Conditions of the Pyriformis Muscle
      - iv Sacro-iliac Disorders (?)

Fig. 2.

leg is occasionally lowered to the horizontal for a few seconds. The results in properly selected cases are miraculous. However, manipulation should never be done without a preceeding x-ray study, and even in experienced hands it has been productive of some accidents, such as dislocation of the femur or damage to the nerve.

X. *Braces and Supports.* In some cases, due to lumbar, lumbo-sacral, or sacro-iliac disease, after the pain is relieved by rest and other measures, it is sometimes necessary to prescribe a brace or support to prevent recurrence.

XI. *Deep X-ray Therapy* has proved beneficial in funiculitis. It is also of some value in arthritis of the hip when other methods fail.

XII. In a small selected group of cases operation will be indicated aiming toward lumbo-sacral or sacro-iliac fusion. Heyman[20] has recently reported two cases of persistent sciatica in which the cause was questionable, which were cured by subperiosteal stripping of the gluteus maximus muscle and ligament from the area of the posterior superior spine of the ilium.

PROGNOSIS

The prognosis in any case of sciatica depends on the cause and the duration thereof, and should always be guarded. When due to myofascitis, the prognosis is most favorable, with relief obtained usually in from three to six weeks. When due to spinal arthritis, the problem is of course that of the arthritis. Relief may be obtained in from one to six months, but recurrence is common. In sacro-iliac disease, the immediate prognosis is favorable, although a support may be required in the more severe cases. In both of these conditions radical measures are occasionally necessary before relief is obtained. In all sciaticas the outlook is better in the more recent cases, becoming more doubtful the longer the case has persisted.

With the best of care we cannot expect to give relief in all cases. Craig and Ghormley[21] report treatment of 239 cases at the Mayo Clinic, analyzing their results to determine the best methods of treatment. Their best results were obtained with a combination of rest, epidural injections, extension, diathermy, foreign protein, and removal of infective foci, which treatment gave complete relief in eighty-five per cent and moderate relief in the remainder.

In closing, two suggestions seem appropriate:

1. No treatment should be attempted until the correct diagnosis is determined.

2. In the prescribing of physical measures, do not overtreat. We may here do well to follow the dictum of the dermatologists, "Soothe the acute, and stimulate the chronic."

[20] Heyman, C. H.: Thoughts on the Relief of Sciatic Pain. *J. B. and J. Surg.* 16:889, October, 1934.

[21] Craig, W. McK. and Ghormley, R. K.: The Significance and Treatment of Sciatic Pain. *J. A. M. A.* 100:1143, April 15, 1933.

THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION
DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

Office of Publication: 1021 Hume Mansur Bldg., Indianapolis.
Editor: E. M. SHANKLIN, M. D., 5141 Hohman Avenue, Hammond, Ind.
Managing Editor: THOMAS A. HENDRICKS, 1021 Hume Mansur Building, Indianapolis
Editorial Board:
F. T. ROMBERGER, M. D., Lafayette.
T. B. RICE, M. D., Indianapolis.
PIERCE MACKENZIE, M. D., Evansville.
L. P. HARSHMAN, M. D., Fort Wayne.
ERNEST RUPEL, M. D., Indianapolis.

SEPTEMBER, 1935

EDITORIALS

VENEREAL DISEASE AND THE LAW

In this number of THE JOURNAL, under editorial notes, appears an article from the August *Bulletin* of the Indiana Division of Public Health, relative to a successful prosecution for perjury in connection with an application for a marriage license in the Vanderburgh County clerk's office.

This is the first case of the sort that has come to our attention. Most of us have had occasion to wonder why such a prosecution had not before been attempted, since we have known of scores of instances in which we felt certain that a charge of this sort would be upheld by the courts. In the present instance, the man in question had been a patient in the Evansville Public Health Venereal Clinic, and of course his record therein was well established. Little could be offered in his defense, and the trial judge is to be congratulated for the wisdom displayed in handling the situation.

The whole matter presents a number of lessons that we of the medical profession might well take to heart; indeed, our law-enforcing agencies might learn some valuable things as well, if they would but ponder this case.

We have had much to say relative to the spread of venereal diseases; various national and state governmental agencies have spent no little time and huge sums of money in an effort to control these preventable diseases. We recall that, during the World War, when for one reason or another we were debarred from actual participation, we were assigned as one of a considerable number of "medical missionaries" to go about the state, preaching venereal disease prevention and control. It seems that the medical department of the United States Army was very serious about this thing, and arranged a most pretentious program, not the least interesting part of which was the establishment of government venereal clinics in our larger communities. Well do we remember that in the winter of 1918 and 1919 when the entire country was battling the "flu" epidemic, those in general practice, especially in our larger cities, were so busily engaged that they had no time to attend to their customary office hours, and it was then that we, long since removed from general practice, found it necessary again to engage in that field in looking after the office affairs of several of our confreres. And well do we recall the number of venereal cases that were traceable to a common source, and how that source, a young woman in a neighboring city, was promptly placed in quarantine! That, as we say, was a long time ago, and we have not heard of a similar quarantine since soon after the close of the war.

That recent "graduates" from our venereal clinics wend their way toward the hymeneal altar soon after their dismissal, that all too many take this step when they are far short of "graduation," cannot be gainsaid. That this thing very commonly spells disaster is too well known to admit of debate; we all know about it; we are continually talking about it, in one form or another, in our medical meetings, yet we do little or nothing about it. We will go so far as to declare openly and frankly that the medical man who remains mute when he has definite knowedge of an existing venereal disease in a person about to be married falls far short of his duty to society and to his profession; there is no good reason why he should sit idly by when he knows that this marriage is bound to result in disaster to one or both of the parties concerned.

We are glad to know that an Indiana judge has found it possible to uphold the dignities and the decencies of his Hoosier state and that he had the courage to support our Division of Public Health in the enforcement of this proper and necessary law.

FLY ON!

Within the past few weeks five aviators, well known to Indiana citizens, have lost their lives in aeroplane mishaps. All were veteran flyers, all loved the sport, and all were vitally interested in the progress of aviation. None would wish in any way to be a deterrent to the cause they worked so hard to further. The whole nation mourns for Will Rogers and Wiley Post. All Indiana regrets the untimely death of Dick Arnett, only son of Dr. A. C. Arnett of Lafayette. Dr. Arnett attested his faith in the future of aviation by flying to the scene of the accident which took three lives —Dick Arnett, his bride of a month, and Burnside Smith, a prominent Indianapolis business man.

In spite of our own timidity, we cannot but feel that each of these five would wish to fling the torch of enthusiasm and encouragement in aviation to other hands with the words, "Fly On!" We believe that their sacrifices are comparable to those of the many experimenters in medical science who have sacrificed their lives in the interest of medical progress; their names deserve an equal place of honor in the pages of our histories.

PHYSICIANS IN POLITICS

A little note has come to our attention concerning a group of several physicians who had been elected to the Canadian House of Parliament; in fact, the group was of such size that it attracted more than ordinary attention. This led us to thinking that few physicians have been members of the Indiana General Assembly over a period of several years. The legal profession seems to have taken over both the House and the Senate, insofar as numbers are concerned, yet there would seem to be no good reason why this should be so. As a matter of fact, bills drawn up by the legal fraternity do not seem to be of any more benefit than those presented by other members of the legislature, nor do they stand up in court better than the others. It is certain that the medical profession does not have to doff its crown to any other group of Hoosier citizens when brains are considered.

Let us consider financial matters. It seems that if an attorney can manage to get by with the salary allotted to legislators in our state, then physicians should be able to do as well.

All of this means that we believe that Indiana needs more medical men and fewer lawyers in her legislative bodies. To many of our members, this would mean little more than a winter vacation, each alternate year, a thing that most of our older members could well afford, and we do believe that the older members should be the ones to seek such posts. We followed the grist of proposed legislation presented during the 1935 session, and came to the conclusion that members of the medical profession were better fitted to judge the merits of the majority of them than any other professional group.

We do not suggest this because of a desire to pack the Assembly to the end that we might be able to get some needed legislation; far from it; the medical profession of Indiana has little cause for complaint because of its treatment by our law-making bodies. Indeed, we have fared very well in the period from 1897, when the present basic medical law was enacted. However, we do feel that our legislature needs new blood, and a lot of it; too long have we had about the same old crowd down there, passing this or that bill, and causing the demise of others, with a weather eye to political effect rather than to the absolute merits of the bills in question. We do believe that a medical man, one who has been in practice for a number of years, would show more acumen than most any other individual.

Any history of medicine, whether it be a county, city, or national type, teems with the doings of medical men in matters of state. We go back to Dr. Benjamin Rush, then trace our way down through decade after decade, finding more or less illustrious physicians occupying similar positions. Today we have too little of this thing; we need more doctors in the Indiana legislature and by that we do not mean quantity alone—we want quality along with it.

Look about in your own community; check over the potentialities of your fellow practitioners; we are sure that you will find plenty of legislative timber, and it is certain that such timber will more than measure up to the average of the membership in the General Assemblies of the past decade or so.

Let's have more medical men in the Indiana legislature, which is tantamount to saying, let's have more brains and more common sense in our General Assemblies.

OAKS FROM ACORNS

A long time ago we heard something to the effact that a little acorn might, in time, become a great big oak; we had all but forgotten about it until the other day when there came to our desk an innocent-appearing pamphlet, the front page of which carried the information that it reported a hearing before a subcommittee of the Committee on Agriculture of the House of Representatives, June fourteenth. This was sent to us by a member of our Editorial Board, else we might have overlooked a matter of very great interest.

It seems, now that we have gotten together the whole story, that for some years a little group of physicians have been studying food values and have come to the conclusion that certain foods grown in different sections of the country often have a varying food value. They have been endeavoring to interest Congress in legislation looking toward a Federal analysis of food values as represented by various districts. The hearing was arranged with this in view. A physician in one of our southern states had long been interested in the problem, and he was duly appointed by the Board of Trustees of the American Medical Association to officially represent that organization in this hearing. The published report of these proceedings made this man say a lot of things that would better have been left unsaid.

His opening statement interested us: "One of the distressing things that we learned from the war was that we knew so little about foods, though we observed the rapid deterioriation not merely among the officers but the soldiers in the ranks as well." A little later the speaker is made to say a thing that would not be accepted in any medical

circle: "We have found that cancer is unquestionably a food deficiency trouble." A little later he pays "tribute" to a man who has been called the "arch enemy" of the medical profession: "Bernarr MacFadden, one of our great publishers ——." Again we read, "the other is vitamin B, which we get mainly from sunshine."

Later on in the hearing it develops that the speaker is the appointed representative of the American Medical Association and that he is speaking, authoritatively, for that organization. The whole thing reeks with misinformation, misinformation of the sort that does a whale of a lot of harm; misinformation that will arise and smite us for years to come, due to the fact that this is an official publication from the United States Government Printing Office.

Immediately on reading the pamphlet we wrote A. M. A. headquarters, demanding to know something about this chap who spoke so freely and so incorrectly; we wanted to know who was responsible for the appointment and why, in the name of all that is holy, such a man was given carte blanche to go about such a business. We received a prompt reply, together with a copy of a letter written to A. M. A. headquarters in response to a complaint they had made to the speaker. This reply opened our eyes to a good many things, chief of which is the fact that one who essays a more or less public address on a medical subject should demand the right which is his, that he be permitted to read proof on the article before publication. The speaker intimates that the proof was sent him but that he did not take the time to read it! Shades of something or other! Here we have a man representing the greatest medical organization on the face of the earth, making what amounts to a public address on a subject of very vital importance, yet making no apparent effort to assure himself that he is being correctly quoted. As we have said, some of these alleged statements will pop up here and there over the country for years to come. It is all very well to say that such statements were not made, but the bald, stark fact is before us that they are a matter of record in an official publication.

It is well not only to be careful of what one says but to take extra care to see that one is correctly quoted.

A. M. A. DIRECTORY

The fourteenth edition of the American Medical Directory is now under process of compilation and will come from the press early in 1936. As is rather generally known, the Directory lists all physicians in North America as well as those living in our insular possessions. A brief but authentic listing is made, giving the year of birth, date and place of graduation, date of licensure in the present location, together with information as to any specialty. Members of county medical societies are listed in black face type, giving a prominence that has been found to be very much worth while. Insurance companies, chief surgeons of railroads and industrial plants, as well as numerous others, use this directory for consultation in the making of medical and surgical appointments. County society secretaries would do well to advise all eligible nonmembers of the fact that a member-listing is of the greatest importance and that the "gate will be closed" at an early date. The Directory is issued each two years, hence it will be a long time before the 1938 edition comes out. It is certainly a most convenient volume; we have been using it since the first edition and find it almost the handiest thing about the office. Many of our colleagues seem to have learned that we have the volume at hand and we receive several calls each week for information about this or that matter, available in the A. M. A. directory. Better see to it that you are in good standing in your home society, so that you may be properly listed.

EDITORIAL NOTES

We welcome the return of our president, Dr. W. J. Leach, to our pages with his President's Page this month. You will find it interesting.

Plans for making available insulin for the indigent in accordance with the measure passed by the last legislature have been completed by the Division of Public Health and are explained in this Journal under the "Capitol Dome" column.

All physicians will be interested in the news that the federal district court upheld the Kansas Board of Medical Registration and Examination in its revocation of J. R. Brinkley's license to practice medicine. Brinkley's license was revoked several years ago, since which time he has operated, according to the *Journal* of the Kansas Medical Society, "on one or another of the banks of the Rio Grande." At least he is through "quacking" on U. S. soil.

A summary of the new regulations concerning injured employes of Works Progress Administration is reprinted on page 461 in this issue. The summary was prepared by the American Medical Association and is reprinted from the *A. M. A. Journal*. It is interesting to note that reasonable charges will be allowed for medical services to physicians and surgeons throughout the United States. Fees will not be allowed in excess of the minimum charge prevailing in the community for similar services.

CENTERED on this page is a list of the names of out-of-state speakers who have accepted places on the program for the Gary session. While they are outstanding and their subjects should provide interest for every member of the Indiana State Medical Association, they are by no means the sole attractions of the Gary session. Your own confreres are participating in a program of such scientific worth that it is a veritable postgraduate course—offered to you without cost. Can you afford to miss it? Get in line with the progressives—they will be registering early!

Below is a List of the Out-of-state Speakers Who Will Appear on the Program at the Gary Session, October 8, 9, and 10

ISAAC A. ABT, M.D., Professor of Pediatrics, Northwestern University Medical School, Chicago

RALPH M. WATERS, M.D., Professor of Anesthesia, University of Wisconsin Medical School

NORMAN F. MILLER, M.D., Professor of Obstetrics, University of Michigan Medical School

LOUIS J. KARNOSH, M.D., Asst. Clinical Professor of Nervous Diseases, Western Reserve University School of Medicine

A. L. SCHWARTZ, M.D., Cincinnati

J. TATE MASON, M.D., President-elect, American Medical Association

VIRGIL S. COUNSELLOR, M.D., Asst. Professor of Surgery, University of Minnesota, Graduate School of Medicine

SANFORD R. GIFFORD, M.D., Professor of Ophthalmology, Northwestern University Medical School

ELEXIOUS THOMPSON BELL, M.D., Professor of Pathology, University of Minnesota Medical School

WILLIAM F. BRAASCH, M.D., Professor of Urology, University of Minnesota, Graduate School of Medicine

LOUIS GEORGE HERRMANN, M.D., Asst. Professor of Surgery, University of Cincinnati College of Medicine, Cincinnati

EMMET F. HORINE, M.D., Associate Clinical Professor of Medicine, University of Louisville School of Medicine

---

SHERMAN, in his autobiography, said: "The great majority of wounds and of sickness should be treated by the regimental surgeon on the ground under the eye of the colonel; as few should be sent to the brigade or division hospital as possible, for the men always receive better care with their own regiment than with strangers, and as a rule the cure is more certain." Sherman's wisdom applies now quite as well as then. Any individual will receive more understanding attention at the hands of his own physician than at the hands of a salaried stranger who has no particular interest in the patient and his problems.

AMONG the numerous worthwhile publications of the A. M. A. for lay consumption is "145 Questions and Answers on Health." We believe this little booklet should occupy a place in the reception room of every physician; it is very well done, the answers are short and to the point and, above all, it does not overlook stressing the fact that sick people should consult their physicians. The closing paragraph of one of the answers serves to illustrate this point: "It is safest to consider physicians who are members of the county medical society and who may also have connections with good hospitals or with medical schools which are given an 'A' rating by the American Medical Association."

NOTWITHSTANDING some very good legislation on the subject of stream pollution at the hands of the 1935 legislature, the thing is yet an acute problem. We are sorry that the legislature was not in session a few weeks ago, when thousands of fish were washed ashore in White River, in and about Indianapolis, all because a factory chose to discharge poisonous wastes therein. We have been about quite a bit in northern Indiana this summer, and have seen numerous instances of stream and lake pollution of considerable proportions. When, oh when, may we expect to have the necessary laws and the necessary enforcement agencies such as will preserve the heritage properly belonging to our citizens, that of unpolluted lakes and streams?

OUR editorial, "Again Politics," seems to have aroused great interest among our folk; we have had several comments on the editorial, all of a favorable nature; some of the writers opined that we did not go far enough and that our language was a bit weak! We presume this thing will continually crop up. In fact, we feel pretty certain that it will continue to pester the profession until such time as we make a general demand that our rights and privileges be accorded us. It is all very well for THE JOURNAL to comment on such things, but THE JOURNAL is read by medical men. The chaps we want to reach do not see THE JOURNAL. We believe that every member who feels aggrieved over such situations would do well to write to our state officials, setting forth his personal opinion in the matter.

A MEMBER of our Association wrote to us a few days ago, complaining because one of the University hospitals had refused to advise him as to the diagnosis of a case that had been under treatment at that hospital. The physician felt aggrieved over this refusal and seemed quite put out about it. As a matter of fact, the law regarding privileged communications applies to hospitals as well as to physicians, and a hospital which broadcasts such information soon will find itself embroiled in trouble of a serious sort. Of course if a physician sends a patient to the University hospital, that physician has every right to an opinion concerning the diagnosis in the case, but if the patient leaves the hospital, and later engages the services of

another physician, that second physician has no right to expect a statement from the hospital, without the written consent of the patient.

IT SEEMS that our comment in a recent number of THE JOURNAL relative to the present game warden situation in Indiana attracted no little attention; our members who indulge in the pursuit of the finny tribe found in Indiana have commented rather generously about it. An interesting comment is to the effect that on a recent Sunday, Warden Sloan, of Starke and Marshall counties, checked some ninety-seven boats on Koontz Lake and found not a single violation. The occupants of each boat were provided with the proper licenses, and their catch was in full conformity with the Indiana fish and game laws; this is a far different story from many of our experiences at Koontz Lake, years ago, when cheating, fish-hogging, and open violations were often the rule rather than the exception.

YEARS ago, Bill Herschell, of the Indianapolis *News*, wrote a poem that remains one of our favorite Hoosier ditties—"Ain't God Good to Indiana?" It has a swing—almost a lilt—to it, and it says so many good things about our favorite state that we continue to admire it after these many years. Well, we've been doing quite a bit of running about this old state of ours, of late, and have come to the conclusion that God remains in a kindly and beneficent state insofar as we are concerned. Certainly our crop prospects look better than for years past; never have we seen a better stand of corn than is to be found in central Indiana, and the other standard crops measure up to the fondest expectations. All of this augurs well for Indiana physicians, for say what you will, when the rural communities are hard hit, we of the medical profession are among the first to notice it.

THE A. M. A. office must have been hard pressed this last month to keep abreast of the inquiries concerning front-page publicity seekers who freeze monkeys for a pastime or advise people in general, and women in particular, to sleep in a nude state "so that the skin may breathe." The quashings from headquarters were unusually prompt and effective and done in a manner that would have been unbelievable a few years ago. This is as it should be. Why should authoritative sources of information be silenced? We believe that the public is becoming educated to the fact that the medical profession is sincere in its desire to protect the public from quackery. What was once considered to be meddlesome or jealous interference is now recognized as truthful good sense. We compliment the A. M. A. headquarters office for its promptness in publicly exposing the idiocy of these two recent "stunts."



STOP! HAVE YOU MADE YOUR HOTEL RESERVATIONS FOR THE GARY SESSION? BETTER DO IT NOW

(List of hotels and rates appears on page 444)

"BASED upon an investigation of the resources of the individual an adjustment of fees for needed medical services, according to ability to pay in graduated installments, in most instances meets the problem of the individual patient who is not wholly indigent. It is to this type of organization that the Legislative Committee referred in a previous communication as meeting public and individual requirements. If the individual is indigent he obviously cannot be expected to pay for medical service on an adjusted fee basis, nor is he provided for in proposed sickness insurance or any plan other than charitable or direct government indigent relief. In that instance medical costs are only one phase of the individual's economic distress, and his problem requires more comprehensive measures than simple provision of medical services." Thus does the Committee on Legislative Activities of the American Medical Association point out one reason for the ineffectiveness of sickness insurance.

WE trust some brave member of the House of Delegates will have the courage to present at the coming Gary session a resolution to the effect that the Indiana State Medical Association shall pay a reasonable portion of the expenses of our members of the House of Delegates to the A. M. A. With the present income of our Association there is not the slightest reason why this should not be done. As we have frequently pointed out, these four men spend approximately a week from their business, pay all their own expenses, all for the purpose of representing us at the annual A. M. A. meetings. Let's give these fellows their railroad and Pullman fare at least; better still, add a little per diem, say five dollars, so that at least some of their expense will be reimbursed. Many other states pay the entire expenses of their delegates and if they can do it, surely Indiana can; we have never before taken a back seat for any other state association except perhaps when it comes to posts in the official family of the A. M. A.!

Medical Economics for June, 1935, publishes the following, which we believe may be interesting to many Indiana physicians: "I express admiration for the Soviet system of socialized health," writes John A. Kingsbury, late Milbank Fund secretary,

in a letter published by the *New York Herald-Tribune* on May 19. "However," he adds, "I have never advocated the adoption of a similar health insurance plan in the United States."

Mr. Kingsbury penned his letter to the paper, he declares, in order to correct the impression it gave on April 20 that the erstwhile fund officer had advocated a plan for the U. S. similar to the system of state medicine which now blankets the U. S. S. R.

The Kingsbury epistle lists the *Journal A. M. A.*, the *Journal of the Indiana State Medical Association*, and the *Journal of the Medical Society of the State of New York* among those which "have been misrepresenting me and my associates for more than a year" and "have resorted to every tactic known to propagandists to deceive the public . . ."

FROM the Children's Bureau of the Federal Department of Labor comes a letter regarding an examination for specialists in maternal and child health, asking if any of our Indiana physicians might be interested in such a proposition. The letter is not at all clear as regards the plan in mind, although it does say, "I am wondering whether you would know any physicians who should be asked to fill out the examination forms so as to be available on the Civil Service lists in case opportunities for work in the maternal and child health program of the Children's Bureau should arise in the course of the next year or two." The letter then goes on to say that those passing the examination may, at some future time, be assigned to different phases of work, such as administrative work, research, or educational activities. Further on is the somewhat illuminating statement, "It is possible that the Children's Bureau will be asked to suggest to states and communities the names of individuals who are available for various types of work in these fields and for that reason we will be glad to have physicians interested to fill out the forms." Well, well! So the Children's Bureau is getting ready for some possibility or other! We do not know what it is all about, but it surely does seem that there is something in the offing, a something that might well be looked into. We would suggest that our headquarters officials at least do a bit of checking—a double check, if you please—check to see what is going on and then attempt to check that very thing, if need be. Could we have been a little premature in the belief that official Washington had decided to stop, cease, and desist in their one-time attempt to put the Federal Government into the practice of medicine?

SEEMS as though we get one thing all straightened out only to find some new complication arise and pester us. This time it is in connection with misleading advertising in relation to the optical trade. During the recent session of the Indiana legislature we were concerned with some changes in the optometry bill in the matter of restrictions as to advertising of prices of glasses. Our optometrist friends for the most part have complied with the present law in this regard, though of course some of the chain store outfits have occasionally gone off the reservation. Now comes the complaint from the secretary of the State Board of Optometry that a member of the medical profession is advertising thus: "Guard your children's eyes. A *competent* specialist will examine your child's eyes according to the latest medical methods, and fit him with proper glasses at a combined cost of $6.50 to $8.50, depending on the lenses needed and the frame chosen, including examination." Of course this chap, while licensed in Indiana, is not a member of the local county medical society, nor could he become a member under the circumstances. The advertisement is grossly misleading, in that no competent eye specialist will render efficient service for the price quoted. We have been engaged in eye work for a considerable period of years and have never known a time when so much incompetent work was being done and such shoddy materials were being handed out as is the case at present. And, as we have often said in these columns, we seriously object to having the eyes of our children subjected to the ministrations of these cut price fellows. Vision is one of the most important things in life and the proper correction of eyestrain at once becomes one of the most important duties of the medical profession. Medical men should see to it that their patients are fully advised to beware the advertiser in all things pertaining to health matters and, above all, in matters pertaining to the care of one's eyes.

Sauce for the Goose—Medical Staff of Kremlin Fighting to Save Filene.—"Moscow, Aug. 7—(A. P.)—Joseph Stalin, Soviet dictator, ordered all medical facilities of the Kremlin placed at the disposal tonight of Edward A. Filene, seventy-five-year-old Boston merchant and philanthropist, who is seriously ill of pneumonia at a hotel here.

"Filene's condition was somewhat improved tonight after a slight relapse at noon.

"The Foreign Office wired the Soviet Consulate in Berlin to grant an immediate visa to the German heart and lung specialist, Prof. Fritz Meyer, so he could come here tomorrow by airplane."—(*Detroit Free Press* of August 8, 1935.)

Mr. Edward A. Filene, President of William Filene Sons Company, Boston, is the organizer of the Twentieth Century Fund. This Fund and its sponsor are foremost among the propagandists for socialized medicine in the United States.

The dispatch cited above comes to our attention as we go to press August 10th. The object of Mr. Filene's visit to Russia we do not know. If he planned to see at first hand the inner workings of completely socialized medicine, unkind Providence

provided the opportunity *par excellence* in the form of pneumonia. The press report seems to indicate Mr. Filene's sudden distaste for Red Medicine—for himself. Though surrounded by Russia's highly touted socialized medical system, Mr. Filene nevertheless felt it necessary to seek medical aid from Nazi Germany. What he has prescribed for the poor American is obviously not of a flavor he prefers for himself. What is sauce for the goose is apparently not sauce for the gander. Once again, distant pastures have lost their verdure.

We wish for Mr. Filene a speedy recovery so that he may return to Boston and tell his reasons for this apparent change in attitude. Within the last year another Foundation ceased its propaganda for socialized medicine. Will the Twentieth Century Fund follow suit?—(*Detroit Medical News*, August 19, 1935.)

WELL, we've had our Grass Roots at Springfield, Illinois; we've had our Indiana Republican Editors gathering at Lake Wawasee; we've had our Democratic Editors Pow Wow at French Lick; looks as though we are going to have a lot more of this sort of thing. Our Democratic friends, being the "Ins," are looking for ways and means to perpetuate that delightful state; they like this "In" business and want to continue it. On the other hand, members of the G. O. P., now the "Outs"—and, boy, but they are out, plenty!—do not like their present state, hence they want IN. Thus we have all the ingredients that go to make up a good political battle. Standing away off to one side and taking a perspective of the whole layout, it seems that the big question in Republican circles is what to do with the Old Guard. The general consensus of opinion seems to be that this group has served its purpose, whatever that may have been, and that now is the time for all young Republicans to come to the aid of their party. Here in Indiana we have a pretty set-up to watch. Our Constitution contains the very wise provision that a man may not succeed himself as Governor, hence every four years we have a bang-up scrap for the honor and glory of leading the state ticket. From the list of willing candidates so far announced, it would seem there will be a lot of sore spots in both camps, after the spring conventions. We often wonder how some men among those mentioned in the list of possible candidates ever got the notion that they were gubernatorial timber, but some folks have a lot of what we used to term "brass," an expression that was universally applied to forward folks, back in our Wild Cat days. We opine that the next general election will be one of extraordinary interest; there will be more platform planks than ever before; charges and counter-changes will be rife, and it is an open question as to whether the best man will win. We shall watch this campaign with more interest than we have shown in any similar event, and we have been a voter since November 3, 1896.

FROM the August *Bulletin* of the Indiana Division of Public Health we reprint the following:

Patient Infected with Syphilis Convicted of Perjury—This is the third case involving persons infected with a venereal disease who have recently been prosecuted in Vanderburgh County, Indiana. On April 2, 1935, a marriage license was issued by the Vanderburgh County clerk, Evansville, Indiana, to Mr. ——— and Miss ———, residents of Evansville. The records indicate that they were married on the same date.

On May fifteenth the Vanderburgh County prosecuting attorney filed an affidavit against the man, charging that a false affidavit was filed when he applied for a license to marry, as he falsely swore he was not infected with a venereal disease when in fact he was infected with syphilis. Arraignment was on May sixteenth. The defendant pleaded not guilty. The trial date was May eighteenth. The state heard the testimony of the director of the Evansville, Indiana, Public Health Venereal Clinic, who stated that Mr. ——— was a patient at the Clinic and had been receiving anti-syphilitic treatments. The evidence of the Vanderburgh County clerk disclosed that when the defendant applied for a marriage license he swore he was not infected with a venereal or transmissible disease. Miss ——— testified she married the defendant and the state rested. The counsel for the defense placed the defendant on the witness stand. The defendant said he had not been told he should not marry and that at the time of the marriage he did not know he was infected with a venereal disease, and inasmuch as he had not had sexual relations with his wife she was not exposed to syphilis. The defense then rested. The judge of the Vanderburgh County Circuit Court remarked that, despite the fact that the defendant displayed the mentality of a ten year old child, the law enforcement officials and health officers of Evansville and Vanderburgh County are making a sincere effort to curb the spread of venereal diseases and that the court would uphold these officers in this movement.

The defendant was fined $500. Being unable to pay the fine, he was remanded to the custody of the county sheriff to be transferred to the Indiana State Penal Farm.

Health officials at Evansville and in Vanderburgh County are interested in enforcing the provisions of the marriage laws as a protection to society. These prosecutions have been most important. It has now been proved that matrimony under these conditions is in direct violation of the law. We hope that this action on the part of these officials will become an example for other public health and law enforcement officials in the State of Indiana. The Evansville and Vanderburgh County authorities are to be commended for their successful effort to avert some of the many tragedies that result from the procreation of those who are mentally and physically unfit for marriage.

THE PUBLIC HEALTH ASPECTS OF THE SOCIAL SECURITY ACT

VERNE K. HARVEY, M. D.
DIRECTOR, INDIANA DIVISION OF PUBLIC HEALTH

It is specificially stated in the Social Security Act that Federal funds allocated to states for child and maternal health shall be administered to states through the State Health Departments. Likewise, funds coming through the United States Public Health Service for aid to states in public health work are to be administered through the official state health agency. It has not been determined through what state agency services for crippled children will be administered. It is stated in the Act that the Children's Bureau of the Department of Labor will administer this item from the standpoint of the Federal Government. Indications are that the Children's Bureau will cooperate fully in seeing that this service will be set up so that it will have the cooperation of State Health Departments and the organized medical profession.

The Children's Bureau at Washington does not expect to lay down hard and fast rules in regard to a Child and Maternal Health Program within a state. Such state programs as will fit the particular needs of a state will be submitted by the different State Health Departments.

In Indiana, the State Division of Public Health will have the advice of a liaison committee composed of two physicians from the Indiana State Medical Association and two physicians from the Indiana University School of Medicine, to consult with the Director in shaping the future program as it relates to the health features of the Social Security Act.

It has been plainly indicated by the United States Public Health Service and the Children's Bureau that the health phase of the Social Security Act must be under the direction of adequately trained medical personnel. These two Federal Bureaus have urged that State plans to participate in this program have the approval of the medical profession in the state and of voluntary health organizations. They have stressed the importance of having the state and local programs administered under competent medical leadership.

The service rendered by the United States Public Health Service and the Children's Bureau will be consultative, advisory and educational.

The Conference of State and Territorial Health Officers with the Public Health Service stated that it is the aim of the health sections of the Economic Security Act to stimulate a comprehensive, nation-wide program of public health, financially and technically aided by the Federal Government, but supported, so far as possible, and administered by states and local communities.

The amount to be allotted to the states through the Public Health Service is $8,000,000 annually, for general public health work.

The amount to be allotted to the states for Child and Maternal health work through the Children's Bureau is $3,800,000.

This act provides that the Surgeon General of the Public Health Service, after conference with state and territorial health authorities, shall prescribe certain rules and regulations relative to allotments to states of the $8,000,000 fund. This Conference was held at Washington, D. C., in June, 1935. The following statement was issued by that Conference:

"The protection and promotion of the public health has long been recognized as a responsibility of government. In the United States, however, this responsibility has not generally been discharged in a systematic and adequate manner as have other functions of government such as the protection of property, the provision of means of communication, or the administration of justice and education. Furthermore, there is a marked inequality in the health service now being rendered to different communities, which results in great differences of opportunity for citizens to acquire and maintain health. This condition has been brought about by:

(1) Lack of adequate state and local services for organized health protection,

(2) Lack of appreciation and understanding on the part of the citizens of the measures necessary to promote and preserve individual health, and

(3) Lack of ability of citizens and communities unaided to secure needed preventive services."

In the main, the above statement holds true for Indiana. The State Health Department should be augmented for the purpose of assisting local communities to maintain more adequate local public health services. Let us not confuse public health with medical relief. Medical relief is for that economic stratum of the population in individual economic stress. Public Health services are for all the people and should include services of fundamental public health value, namely:

1. Registration of vital statistics, including morbidity reporting and dissemination of the facts brought out from their study.
2. Communicable disease control.
3. Health education for medical and lay people.

4. Environmental sanitation which includes—
   (a) the protection of public and private water supplies
   (b) proper disposal of human waste
   (c) protection of the milk and food supply
   (d) protection against animal reservoirs of disease and insect vectors.
5. Public Health Nursing to help physicians in practice to demonstrate proper methods of disease prevention and promote health education under the direction of the medical profession.
6. Adequate public health laboratory service for physicians.
7. Adequate services for the study, promotion and supervision of child and maternal health.
8. Promotion of more adequate local public health services particularly for rural communities.

Under the terms of the Act the amounts of the allotments are to be determined on the basis of:

1. Allotments on basis of population will be made on a per capita basis amounting to $4,000,000, fifty per cent of the total sum.
2. Allotment on the basis of special health problems as malaria, plague, hookworm and similarly geographically limited diseases, including training of personnel, amounting to $2,400,000, thirty per cent of the total sum.
3. Allotment on the basis of need amounting to $1,600,000, twenty per cent of the total sum.

The purpose of the $8,000,000 allotted through the United States Public Health Service for aid to states will be available for the following purposes:

1. Aid to state health departments for strengthening service divisions and in providing adequate facilities especially for the promotion and administrative guidance of full-time city, county and district health service.
2. Aid through state health departments for the development of city, county, and district health departments, and
3. Training of public health personnel."

The Indiana Division of Public Health should be strengthened particularly in services designed to guide local public health work by the cities and counties, and in augmenting the present Indiana Plan for education in Child and Maternal Health.

In regard to aid to local health services in cities, counties, or districts it has been stipulated by the Public Health Service that such local services must meet certain minimum requirements before aid is granted through the State Health Department. The most important of these requirements is that the local health service must be under the direction of a full-time health officer who must be a physician meeting certain qualifications as to training in public health.

The Public Health Service has stipulated further that the personnel of the city, county or district health department should include, in addition to the full-time health officer, such assistants as public health nurses, sanitation officers and clerks as will insure at least a minimum of effective public health service commensurate with the population and health problems of the area concerned. The United States Public Health Service in its allocation to states will strive to foster the developments of health units having a minimum personnel of one full-time health officer, two nurses, one sanitary officer and one clerk.

Indiana now has a new health officer law which provides that all health officers must be physicians after the terms of the present incumbents expire. It also provides that a city or county or two or more counties may, if the people so desire, have a full-time health officer. Heretofore, Indiana could not receive federal funds for local health departments on account of the archaic local health officer system. The new law is only permissive for full-time health officers and can not be put into effect unless the local citizens so desire.

The provision for adequate training of medical health officers and other personnel to work under the health officer is a very important item in this act. There would be great danger if this money were to be released to be spent without carefully worked out plans or without trained public health personnel to direct the program, both from the standpoint of the state and local communities. Many abuses in public health have been allowed to grow because of untrained personnel. This danger should be forestalled by influencing the training of new personnel so that they will have a greater appreciation of their proper field, know better the limitation of their responsibilities, and recognize more keenly the problems of the individual practicing physician.

The State Division of Public Health believes that if the purpose of this act, as it relates to health, is not carried out with common sense instead of being influenced by pious hopes of an ambitious group, the proper development of public health will be discredited for many years.

The State Division of Public Health has confidence in the United States Children's Bureau and the United States Public Health Service that the future program will be worked out with careful consideration as it will affect the public and the medical profession.

Any plans proposed for Indiana under this Act by the State Division of Public Health will be conservatively considered with the full cooperation of the liaison committee of the Indiana State Medical Association, members of the State Board of Health, and the administrative officials of the State Government.

GARY IS READY FOR YOU!

October 8, 9, and 10 are days of great expectations to the 200 members of the Lake County Medical Society, which organization is to act as hosts to a thousand or more members of the Indiana State Medical Association at its eighty-sixth annual meeting in Gary.

Not only does the medical profession of this county look forward to these dates, but the whole community is expressing an ardent interest in the program for that week. The Gary Commercial Club, an organization as old as the magic city itself, has announced that it will add one thousand members to its roster for that week, making every visitor a member of that important organization during the meeting. "Cap" Norton, the perennial president of the club, plans to spend the whole week in seeing to it that Gary does things in just the right way.

The entertainment program, while it may not be so elaborate as the much-discussed affair of 1928, when the Association last met in Gary, promises to occupy every available moment of the time of those in attendance. Tuesday morning sees the annual golf tournament under way, with a luncheon following at the Gary Country Club. A feature introduced two years ago, the trap shoot, promises some great sport for those addicted to the clay-bird habit. The Gary Gun Club grounds have been engaged for this event and those in charge of that part of the program are experts in arranging that sort of thing.



Tuesday afternoon is set apart for an officially conducted trip through the steel mills, an event that will be of interest to those who made this trip seven years ago. The production of steel has undergone many changes in that period, so many that this little journey will prove a revelation to all participating.

Nor have the women folk been overlooked; a special committee has been named to plan for them and it now appears that they will have plenty to occupy their time in ways unusually pleasing to our feminine companions.

The scientific program (to use the phraseology of one who has been active in planning that part of the program) will be a "knockout." It's a Hoosier program, through and through, save for the usual number of intellectual guest speakers added as a bit of leaven.

The annual banquet on Wednesday night has come to be one of the features of our annual session and promises to eclipse all former occasions of that nature. In keeping with her custom, Indiana is one of the first to receive an official visit from the president-elect of the American Medical Association. Even as he was being escorted into the House of Delegates at Atlantic City last June, there to be advised that he had been elected to the office, J. Tate Mason of Seattle was headed off by the Indiana delegation in the House and advised that his very first duty was to accept an invitation to be the guest speaker at our annual banquet.

But two speakers will appear on the program, the second being a nationally known man who will speak on a subject that will be well received by a mixed audience—"The Insanities of Great Men."

Lake County invites you—Gary will receive you with open arms. The Lake County medics will close shop for the week in order to assure every visitor a rare time. Begin arranging that desk calendar today! Check over your OB engagements; speed them up if necessary; let not one thing deter you in your plans to come to Gary, there to have a delightful visit with the medics from the Dunes country.

Make your hotel reservations now:

New Hotel Gary—(All rooms with baths)—Single rooms, $2.50 to $4.00; double rooms, $3.50 to $5.00; twin beds, $5.00 to $6.00; suites, $8.00 to $10.00.

Hotel Roosevelt—(All rooms with bath, tub and shower, and circulating ice water)—Single rooms, $1.75 to $3.00; double rooms, $2.75 to $4.00; twin beds, $4.00 to $4.50; suites, $6.00.

Hotel Victoria—Single rooms, $1.00; double rooms, $1.50; with bath, $2.00.

Hotel Washington—Single rooms, $1.50 to $2.00; double rooms, $2.00 to $3.00.

Hotel Lake—(Rates not received in time for publication).

COMPLETE PROGRAM IN OCTOBER

Definite arrangements are rapidly being completed. Complete program with all details as to time and place will be published in the October issue. Watch for it.

THE PRESIDENT'S PAGE

Note: I wish to express my gratitude for the many fine letters and telegrams from many of my friends throughout the state during my recent illness which brought me much courage and good cheer, refreshing as sparkling spring water in a desert waste. I hope to meet all of you at Gary.

LECTURES ON MEDICAL ECONOMICS

The Indiana University School of Medicine has added to its course of training a series of lectures on organized medicine, medical ethics, medical economics, and compensatory equity. This is certainly a laudable project.

A few decades ago when a young physician finished his college work and entered the open field of combat with disease and its causes, he found himself dependent upon his own resources and initiative in dealing with the general public, having not the guidance which now comes to his aid through organized efforts and coordinated impulses which are the ripened product of the experience of the profession.

Some of the older ones among us well remember that if a question of ethics arose we were fortunate if we could recall the Golden Rule which, by the way, is the greatest moral document ever delivered to man; but it presumes that all men have the same sense of justice, which is not true, because some men are more inherently selfish than others. Therefore, some code of ethics had to be devised for the guidance of all.

When Dean Gatch introduced me to his senior class of one hundred men, of whom he is so justly proud, I knew I faced a group of the keenest and cleanest young men of the communities from which they came. This is inevitably true because of the high qualifications necessary for their matriculation.

This is the proper time for such training, because they are young and in the impressionable age, literally and professionally. At the beginning of their professional career, having a capital stock of approximately $17,000 in time and money, with funds running low and ambition running high, they will face the greatest temptations of their lives. If they are trained along the foregoing lines, they will not yield to the importunities of socialized medicine, nor accept low stipendiary proposals for contract or regimental service; nor will they even contemplate "chiseling" decent prevalent fees. Engaging in either of these evils would at once be as apparent to them as donning hobble chains to hold them down to fettered levels in their professional careers—such stigmata are most difficult to live down.

They will not be guilty of over-charging, or over-treating patients, who might have more confidence than intelligence; or of dividing fees without the consent or knowledge of the patient. They will not fail to recognize the added security and prestige afforded by organized medicine, nor will they doubt that what is good for the whole profession is good for them as individuals. They will not fail to appreciate the fact that the heritage of these advantages circumvents the difficulties of their medical forefathers. They will recognize the fact that one alone cannot map out a successful course, but that organized medicine is a potential part of human society, and when it speaks with one voice, human society will cooperate with felicity.

Again, the aforesaid training will inspire personal and professional conduct which establishes them as dignified, cultured professional men in the eyes of the general public, which is a most valuable asset. They will also be reminded that the difficulties of one medical man are more or less common to all, and that the greatest difficulties in medical ethics come from outside the profession because the laity does not understand the full intention and purpose of professional ethics, and laymen often pervert facts for selfish purposes.

Young physicians soon will learn that gossip over the back fence is most dangerous to the amity between doctors; therefore, early and amiable contact between the doctors is the surest method of satisfactory settlement. We doctors know a lot of good jokes on "Meddlesome Matties" and our continued friendship greatly amazes the would-be disturbers.

Well trained young doctors should feel free and easy to call on older members of organized medicine for any sort of advice and counsel when a question of policy or method of treatment arises. Senior members of the profession will appreciate the honor and gladly comply.

Our young doctors must realize that the medical profession and the public are mutually dependent upon each other, and both must espouse generosity and honesty of purpose, which will aid in the discouragement of designing propaganda against the profession.

The medical department of Indiana University, with its splendid faculty and efficient hospital facilities for teaching and its reputation for high standard requirements for registration and graduation, is something of which all Indianaians should be justly proud. Furthermore, it adds prestige and strength to the organized profession in Indiana.



MEETING TODAY'S CHALLENGE

BY L. B. McCRACKEN, MANAGER, MEDICAL AND DENTAL BUSINESS BUREAU OF INDIANAPOLIS

(This is the fourth and final article concerning a plan for medical service adopted by the Indianapolis Medical Society)

Steps leading to the adoption of the Medical Service Plan by the Indianapolis Medical Society have been given in previous articles. The plan has now been in operation thirteen months and the need, success, and feasibility seem to be assured.

During these thirteen months, from June 1, 1934, to July 31, 1935, 351 cases have been handled through the bureau totaling $17,928.35 for physician's services and $14,942.04 for hospital services. A remarkable increase is being shown each month.

Reasons have been given previously why a large percentage of these patients would have postponed treatment and care or received it elsewhere than through their private physician and hospital had it not been for the Medical Service Plan. To say that the patients are satisfied and grateful for the plan is putting it mildly. Industry is cooperating in every way. The private hospitals welcome this increase in business which should rightfully go to them, and the doctors who are using the plan where applicable find that it fills a long-felt need.

OPERATION OF THE PLAN

There is nothing complicated about the operation of the plan. An individual does not EXPECT to be sick. It is an experience unplanned, usually unprovided for, and it usually comes suddenly. A physician's service is possibly the most needed, yet the least desired. Then in what frame of mind is the individual seeking relief or treatment? He calls at the office of the bureau with a note of introduction from his doctor, employer, or the hospital. He is then escorted to a private consultation room and made to feel at ease. The duties and purposes of the bureau are briefly explained: that it is a business organization under the supervision and, in fact, a part of the Medical Society, acting in the capacity of the credit and accounting division; that through the cooperation of the society members with our local hospitals, a plan has been arranged whereby any worthy individual who cannot pay for medical care in a lump sum can establish his credit and arrange for payment through their business office, the bureau. No loans are made or money advanced and consequently there is no interest or additional charge to the patient in any way. The bureau's service then is to work with him in arranging a budget which will permit his paying for medical care in definite, systematic payments over a certain period of time.

The applicant usually has selected his own physician and hospital and knows approximately what the charges are to be. If not, he is directed to do so, limiting his selection to members of the Indianapolis Medical Society. Under no circumstances does the bureau suggest or recommend a physician or hospital.

A detailed application form is then filled out, disclosing the economic, industrial, and marital status of the patient or the one responsible for the bill. This shows exactly what finances come into the household; where the money goes, even to the amount of gas, light and water bills; who would pay the bill if the patient failed to do so; what old medical bills they owe; what intangible assets they have and who their creditors are now. An analysis of these facts will show what margin the patient has upon which to base his budget for payments. Later these facts are all verified by calling his employer, creditors, etc.

If all arrangements are satisfactory and the case is completed, the husband and wife sign an agreement setting out the total amount and the manner of payment. In many cases a guarantor also signs the agreement, or some other security is secured to assure the payments. There is a thorough understanding about the whole matter, leaving no possibility of future disputes or arguments.

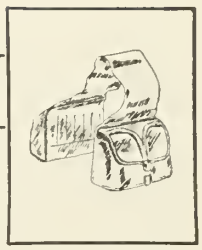
Upon completion of the investigation, the doctor is advised of all details and hospital reservation is made for the patient by the bureau. All bills are sent to the bureau office and payments made by the patients are pro-rated and settled monthly with those rendering service. In this way the physician receives his money along with the hospital.

It seems useless to enumerate the many advantages of caring for those who are not in a position to pay cash by a plan of this kind. There appear to be no disadvantages. Patients readily understand and are anxious for such an arrangement when the need arises. It seems to take the pain out of medical bills by relieving them of uncertainties.

The principal job now appears to be to get the doctors to understand and use it where applicable. Strangely enough, the very men who seek the newest laboratory methods and the most recent discoveries of science, are most reluctant to accept anything new regarding the business side of their profession. The physician equipped with skill in his particular work that comes from knowledge and experience may not be proficient in other fields. Why, then, should he not take advantage of the knowledge and experience of others specializing in the business side as long as it is a cooperative measure, properly supervised and scientifically sound?



INDIANA MEDICINE IN RETROSPECT



L. G. ZERFAS, M. D.
Historian, Indiana State Medical Association

SAMUEL GRANT MITCHELL, Indianapolis, Indiana

It is generally agreed that the first physician to locate in Indianapolis was Dr. Samuel Grant Mitchell, a native of Kentucky.[1] He removed from Paris, Bourbon County, Kentucky, to Indianapolis in April, 1821, following an unfortunate business venture which reduced his state of financial independence to one of poverty.

He had practiced medicine in Kentucky for fifteen years or more and was a licensed practitioner, but had never attended a course of medical lectures.

In a controversy with Dr. Isaac Coe, the second physician to locate in Indianapolis, Dr. Mitchell stated in a letter to the *Indiana Journal*, that "I was first licensed to practice medicine by Dr. Frederic Ridgley, of Lexington, Kentucky, to whom I had the honor of being a private pupil twenty-seven years ago (1803), on the first day of July."[2]

Even though Dr. Mitchell may have never attended a course of medical lectures at Transylvania University, his defense of his training gives us a clear insight into his general ideas and relationships when he states that, "If my humble pretensions have gained for me the public confidence it has only been through years of assiduous application to the science of medicine and if I have been so highly favoured as to have gained the friendship of the Richardsons, Dudleys, and Drakes of the West, I have no solicitude to obtain the favour, (or) to escape the slander of a Jersey schoolmaster.[3] To gentlemen interested I will show my license and diploma. But I say once for all that I have no wish to waste ammunition on crows." The diploma mentioned here probably refers to his honorary degree received from Transylvania University in 1830.[4]

In December, 1821, Dr. Mitchell was given a license to practice medicine in Indiana by the Second District Medical Society which met at Corydon. The certificate reads as follows:[5]

"We, the undersigned censors for the second medical district, have examined Doct. Samuel G. Mitchell, and do hereby permit him to practice Medicine and Surgery in this state, till the next session of this society, to be held at Charlestown, on the 2nd Tuesday of June 1822.

J. Fowler.[6] D. G. Mitchell

Corydon, Dec. 12, 1821."

Dr. Mitchell's brother-in-law, Samuel Henderson, was the first postmaster[7] and the first mayor[8] of Indianapolis, and doubtless this relationship was an added inducement to his settling and remaining in Indianapolis.

At the time of Dr. Mitchell's arrival, Indianapolis was only a village in a very dense forest, with a thick heavy growth of underbrush making it virtually impossible in many places for a man to ride through the forest on horseback. There was but one road opened that might be called a highway; it led to Brookville, Indiana. There was an Indian trail from Strawtown and Connor's Prairie to Vincennes, known as the Vincennes trail. Only a trail was blazed along the Shelbyville Pike. About 1821 or 1822 there was a wagon road opened from Columbus, Indiana, known as the Madison road.[9]

Dr. Mitchell, on his arrival, built a log house on the southwest corner of Tennessee (now Capitol Avenue), and Washington Streets. Later he built a frame house on the northwest corner of Washington and Meridian Streets. He also maintained his office there. In July or August, 1821, Dr. Livingston Dunlap came to Indianapolis and formed a partnership with Dr. Mitchell, which apparently was of short duration, as it is noted in the Indiana Journal, July 5, 1825,[10] that Dr. Mitchell had just received a "new assortment of general medicine which was opened in the house lately occupied by J. Hawkins, Esq., as a store." He men-

[1] Nowland, J. H. B., Early Reminiscences of Indianapolis, Sentinel Book and Job Printing House, 1870, p. 108. Wishard, Elizabeth Moreland, William Henry Wishard, Hollenbeck Press, Indianapolis, 1920, pp. 116, 213. Kemper, G. W. H., A Medical History of the State of Indiana, American Medical Assoc. Press, 1911, p. 31. *Western Sun*, Vincennes, Indiana, Mar. 23, 1822, page 3, column 3.

[2] *Indiana Journal*, Indianapolis, Indiana, June 2, 1830, Vol. 8, No. 371.

[3] The Jersey Schoolmaster was made in reference to Dr. Isaac Coe.

[4] From the register of Transylvania University, through the courtesy of Mrs. Charles F. Norton, librarian. *Transylvania Journal of Medicine and the Associate Sciences*, Vol. 3, No. 2, May, 1830, whole number 10, p. 304.

[5] *Indiana Journal*, Indianapolis, Ind., June 2, 1830, Vol. 8, No. 371.

[6] Dr. James Fowler was a graduate of Transylvania University Medical School, 1824. From the register of Transylvania University.

[7] Nowland, J. H. B., Early Reminiscences of Indianapolis, 1870, p. 109.

[8] Ibid, p. 101.

[9] Wishard, Elizabeth Moreland, William Henry Wishard, 1920, p. 213.

[10] *Indiana Journal*, Indianapolis, Indiana, July 5, 1825, Vol. 3, No. 112.

tions Dr. William R. Ross, a young gentleman who had lately arrived in Indianapolis, and who was associated with him in the practice of medicine and surgery. However, Dr. Mitchell and Dr. Dunlap continued their close friendship, and apparently worked harmoniously for many years in the Central District Medical Society, and in the State Medical Society. Dr. Dunlap, in a large sense of the word, was a protege of Dr. Mitchell.

Eight years after settling in Indianapolis (1829), Dr. Mitchell matriculated for his first course of lectures at Transylvania University, and was granted an honorary degree of doctor of medicine in 1830.[11] He probably did not actually attend the course of lectures.

In the latter year, Dr. John Leland Mothershead came to Indianapolis and formed a partnership with Dr. Mitchell.[12] This partnership was dissolved in 1832,[13] when Dr. Mitchell was appointed surgeon and Dr. Mothershead assistant surgeon in the batallion commanded by Col. Alexander Russell during the Black Hawk War.[14]

The Indiana Journal, July 20, 1833, states[15] that Dr. Mitchell was again in Indianapolis, and during the cholera epidemic of 1832-1833 conditions became so alarming that the first Board of Health in Indianapolis was formed, naming Dr. Mitchell as one of its members. An extensive report of the Board's recommendations concerning the cholera epidemic appeared in that issue of the paper.

Shortly after Dr. Mitchell came to Indianapolis he published an article in the Indianapolis *Gazette*, March 6, 1822,[16] on "Intermittent and Remittent Fever." He refers to Indianapolis and the surrounding area as having a population of one thousand souls, and at least nine hundred sickened during the epidemic. In various places over the state this epidemic occurred in about such proportions. At Charlestown, Indiana, James Fowler describes his personal experiences in a medical thesis entitled "Indiana Epidemic of 1822-1823."[17]

Dr. Mitchell took an active part in the various medical organizations of the state. He served as one of the censors of the Central District Society formed in 1821, which included the counties of Marion, Hamilton, Johnson and Shelby. In 1830 he was elected president of the Central District Medical Society. As a result of this meeting and his election to the presidency, there followed a long controversy between Dr. Isaac Coe on the one side, and Dr. Livingston Dunlap and Dr. Samuel G. Mitchell on the other, concerning the legality of the proceedings. The controversy was published in the *Indiana Journal*. It is rich in historical material concerning medicine in Indianapolis, and her first physicians. The controversy is to be reproduced, not because of the slanderous personal thrusts contained in it but because of the important information which it contains with reference to medical history. The air was apparently well cleared after this controversy.

The earliest published record of the activities of the Central Medical Society which I have been able to obtain was found in an announcement which appeared in the Western Censor and Emigrants' Guide, Indianapolis, November 16, 1824, which stated that at the annual meeting, November 3, 1824, all physicians of Marion County being present, pauper practice was discussed. In 1830 Dr. L. Dunlap, then secretary of the Central District Society, said the society had been in existence six or seven years. This would indicate that the society was formed about 1823 or 1824. Dr. Isaac Coe, in the controversy, stated that in the year 1821 the State Medical Society set off a new district including Indianapolis and the newly settled district around it, and the physicians were ordered to form themselves into a society. Apparently there were only three physicians in Indianapolis at that time, Drs. Coe, Mitchell and Dunlap, the latter two were accused by Dr. Coe of not being duly licensed physicians by the State of Indiana, although they were admitted to membership in the society and served as censors. It seems probable that the activities of the Central Medical Society legally constituted in 1821 functioned largely as a licensing board, until the year 1823 or 1824 when greater formality attended their meetings. Dr. Coe was president of the Society in 1829, and Dr. Dunlap states[18] that Dr. Coe had been president of the Society since its operation here, which has been for the last six or seven years.

Dr. Mitchell was elected president of the Indiana State Medical Society which met in Indianapolis for the first time on Wednesday, December 14, 1825, to serve the following year. At the meeting he served in the capacity of secretary pro tem. Dr. Lawrence Shuler of Terre Haute was president that year.[19] Dr. Mitchell apparently served in the capacity of president of the State Society for a number of years following, as there appears in the *Indiana Journal*, November 26, 1831, this announcement, "State Medical Society annual meeting will be held at the Governor's house, Indianapolis, Tuesday, Dec. 6, at 10 o'clock A. M. Livingston Dunlap, Secretary. S. G. Mitchell,

[11] From the register of Transylvania University.

[12] Wishard, E. M., William Henry Wishard, 1920, p. 219.

[13] *Indiana Journal*, Indianapolis, Ind., Mar. 3, 1832, Vol. 10, No. 478.

[14] Wishard, E. M., William Henry Wishard, 1920, pp. 213-216.

[15] *Indiana Journal*, Indianapolis, Ind., July 20, 1833, Vol. 11, No. 556.

[16] William Niles Wishard, Sr., The Pioneer Doctor—Some of His Handicaps. Reprinted from The Year Book of the Society of Indiana Pioneers for 1928, p. 1.

[17] From the register of Transylvania University.

[18] *Indiana Journal*, Indianapolis, Indiana, May 19, 1830, Vol. 8, No. 369.

[19] *Indiana Journal*, Indianapolis, Indiana, Dec. 13, 1825.

Pres." At that meeting Dr. J. W. Davis was elected president, J. H. Sanders, vice-president, and Livingston Dunlap, secretary. Dr. Mitchell was elected treasurer.

In the year 1831, Dr. Mitchell was still listed as president of the Central Medical Society,[20] and Livingston Dunlap, secretary. He was elected Governor of the legislature, as noted in the *Indiana Journal*, March 12, 1931, which announcement also stated that he would deliver a message on that evening at early candlelighting. The ladies and gentlemen of Indianapolis and its vicinity were respectfully invited to attend. Doubtless he had much to do relative to the controversy which waged in the legislature concerning the incorporation of medical societies for the purpose of regulating the practice of physic and surgery. A more comprehensive study of this phase of his activities will appear at a later time.

Aside from medicine and politics interesting notes appear in the press of the times which indicate that he also had other interests. As early as March, 1823, it is announced in the *Western Censor and Emigrants' Guide* that any person wishing to own the situation will be shown the land by application to Dr. S. G. Mitchell, residing in Indianapolis.[21] In the same year he was a candidate to represent the district in the State Senate.[22] April 16, 1831, he was appointed on a committee to arrange a celebration for the arrival of a steam boat.[23] Such an occasion at the present time would afford like enthusiasm.

Dr. Mitchell lectured on music at the Lyceum[24] March 17, 1832, and was again that year a candidate for representative from the district.[25] The years 1832-33 were busy and trying times for all physicians throughout the Mississippi Valley. The epidemic of cholera was sweeping up and down the water courses and into the main land. Added to this were the Indian difficulties resulting in the Black Hawk War,[26] and the instability of the currency system,[27] along with the stress and strain on the finances of the state imposed by the internal improvement program.

Sometime during the year 1836, Dr. Mitchell had what appeared to be a cerebral hemorrhage.[28] The *Indiana Journal*, July 9, 1836,[29] states: "S. G. Mitchell has re-commenced the practice of his profession. His office is in the room formerly occupied as the post office on Washington Street, opposite the *Democrat* Printing Office. He will punctually attend to all the cases confided to his care in the town and its vicinity. When not professionally engaged, may at all times be found at his office." Apparently he had recovered from the effects of his illness sufficiently to reenter practice. That he still was somewhat unequal to the demands, is indicated by the fact that he soon formed a partnership with W. W. McCoy, with an office on Washington Street, north side, three doors below the Mansion house.[30] His failing health, which grew worse, incapacitated him to the point of being unable to live by his own means, and the generosity of his friends became his only support. Finally Dr. Palmer, of Ohio, an orphan boy whom Dr. Mitchell had educated during his prosperous days in Kentucky, took him to his home and cared for him until Dr. Mitchell's death in February, 1837.[31]

Previous mention has been made of the epidemic which occurred at various places over the State of Indiana including Indianapolis and the surrounding district in 1821-22. Doctor Mitchell has left a very interesting account of this epidemic as it was seen first hand. Because of its general interest and its importance in the history of epidemics and disease in Indiana, it is herewith produced as Dr. Mitchell actually described it.

Remarks Extracted from Dr. S. G. Mitchell's MSS. Historical Notes on Indiana:[32]

The county of Marion, at this time, is supposed to contain upwards of two thousand souls. Indianapolis including the donation, is supposed to furnish half of that number. A rapid population when we take into consideration that the first settlements, commenced on this part of the river in February, 1820. Samuel and James McCormick put up a cabin immediately below the mouth of Fall Creek on the river bank. In March, Messrs, Harden, Wilson, Maxwell, Cowin and Pogue's made improvements in and near this place which settlement was about this time, followed by a number of other enterprizing citizens; but we may cease to be surprised at the increased and increasing population of Indianapolis, when we take into consideration that it is shortly to become the seat of government of Indiana.—That its location is on a charming river in the center of the state; surrounded by a large quantity of fertile land; that the National Road will pass through it, and that near one hundred thousand dollars was appropriated by our last legislature to lay out and open roads to and from Indianapolis—the moneys being drawn from the three per cent funds due Indiana from the general government. In addition to the

[20] *Indiana Journal*, January 26, 1831.
[21] *Western Censor and Emigrants' Guide*, Indianapolis March 19, 1823.
[22] Ibid, May 7, 1823.
[23] *Indiana Journal*, Indianapolis, Indiana, Apr. 16, 1831.
[24] *Indiana Journal*, Indianapolis, Indiana, Mar. 17, 1832.
[25] *Indiana Journal*, Indianapolis, Ind., Aug. 4, 1832.
[26] Wishard, E. M., William Henry Wishard, 214.
[27] Logan, Esarey, History of Indiana, 1918. Vol. I, p. 394.
[28] Wishard, E. M., William Henry Wishard, 1920, pp. 215-216.
[29] *Indiana Journal*, Indianapolis, Ind., July 9, 1836, Vol. 14, No. 729.
[30] *Indiana Journal*, June 10, 1837.
[31] Wishard, William Henry Wishard, 216.
[32] *Indianapolis Gazette*, Indianapolis, Indiana, March 6, 1822, Vol. 1, No. 4, p. 3 c. 2.

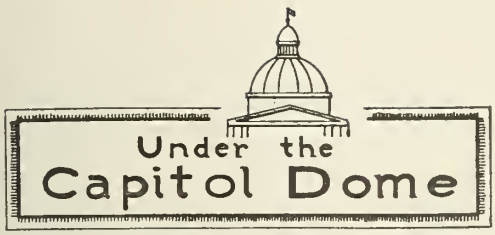
above sum we have the disposable fund which has and will arise from the sale of our town Lots and donation under Legislative direction, for the purpose of making our public buildings, etc.

On the first day of April next our county is to be organized and eight thousand dollars has already been appropriated by the Legislature of this state, out of the monies arising from the sale of Lots in Indianapolis, with which our public buildings will be commenced when the county is organized and county commissioners elected.

One circumstance seems calculated to retard the population of this section of Indiana, it is thought by a number of gentlemen, that there exists local causes that will continue to produce diseases every season; but in and around this place, I think no such cause exists, unconnected with a certain state of our atmosphere. The epidemic of last season could not be assigned to any local agent, it was not confined alone to our town, county or state, but spread its baneful influence west of the Allegheny Mountains covering all that rich and fertile country, called the Mississippi Valley, with sickness, pain and woe. Indeed the northern and southern states were marked by its ravages; we are in a healthy climate, north latitude 39 degrees 40 minutes. We cannot conceive that it was affected by any local cause, as the fever commenced about the tenth of July, that putrifactive process which decomposes vegitable matter by the action of heat could not at that time in this climate have produced disease. And, again, the same disease did not afflict the citizens of this place the preceding season—a few sporadic cases occurred. The dryness of the soil, the height of the ground above the bed of the river, the purity and quantity of water which every citizen obtains by digging wells from twenty to thirty feet, induces us with every reason to expect, we may yet have a healthy town.

In publications of this kind, we must content ourselves with a relation of facts, not arguments. The predisposing causes that caused the citizens of Indianapolis to become the prey of the intermittant and remittant fever was numerous: The thickness of the forest with an unusually wet or damp season—a numerous concourse of strangers crowded together—uncomfortable accommodations —great fatigue of moving and anxiety of mind—liberal use of fresh meat, more especially fish, which was used in great abundance. The disease may have existed in a certain situation of the atmosphere which caused the marsh miasma or diliterous affluvia to be worse on the margin of water courses, which was a fact, and on the east it prevailed more generally than on the west. That is who escaped lived off from the river. Out of one thousand souls in town, on the donation and the farms surrounding the town, at least nine hundred sickened during the prevailing epidemic. Twenty-five deaths occurred before the last of October; about that period the place was restored to health; its fatility was principally amongst children. But the town will long lament the loss of some of its most favorite citizens. The symptoms that marked our epidemic were such as medical writers recognize in the introduction of common violent intermittant and remittant fevers; debility, langor, yawning and stretching, with a listless and inaction of motion; coldness then commences in the extremities, and soon covers the body with sensations, to the patient, of cold water being poured over them. Some cases the coldness only produces chills. In every case it produced universal convulsive shaking; it has then improperly been called ague. Very few cases occurred that we might call well defined cases of ague or fever. The symptoms that succeeded the cold stage were a dry burning hot skin, with a red tence and swollen appearance, pains violent and shifting to different parts of the system, the pulse quick, but not universally strong, the bowels constipated and great thirst; after some hour's pain and suffering, the perspiration becomes universal, the pulse diminished in frequency and became full and free, and all the functions of the system were restored to their natural order. The species of fever differed in different patients and in the same patient in different attacks; sometimes a quotidian, sometimes a tertian, and other times it assumed a quartian type. It was a disease that readily yielded to appropriate remedies, and as readily again and again recurred. During the hot stage the physician's object was to promote perspiration; and to accomplish that object he selected such internal and external remedies as he thought advisable. If the stomack and bowels were well prepared for the reception of the Peruvian bark, it was then genuine and given in spirits, in large quantities (a valuable medicine and rarely disappointed the physician's expectation), the disposition the fever had to recur again and again, and the universal attack of the disease and the few deaths, in proportion to the sick, was a remarkable circumstance strongly associated in our minds with that epidemic.

At this period health and industry gladdens the countenance of our moral intelligent citizens, and plenty abounds in our new settlement. The perpetual noise of the axmen and falling of tall trees of the forest, the rattling of carriages over our rough streets and the busy hum of man, throughout this extensive plain, is constantly sounding in our ears. And we look forward to a period not far distant, when our beautiful river will enable us to waift from its and extensive vallies, an emence quantity of produce. The commerce we shall be able to carry on will at least enable this country to procure a mutual enterchange of conveniences, between this and other countries; it will contribute to our wealth.



STERILIZATION OF THE INSANE
(Acts 1935, Chapter 312, Page 1502)

For those who may not have seen a copy of the law, we reprint herewith the paragraphs pertaining to the sterilization of the insane, as passed by the 1935 session of the Indiana legislature:

DUTIES OF EXAMINING PHYSICIANS. Section 1. Whenever an application for the commitment of any person to an institution for the insane shall be filed in any court having competent jurisdiction, it shall be the duty of each of the examining physicians appointed by the court, as now provided by law, if he shall certify to the court that the person for whom such application is made, is, in his opinion, afflicted with insanity, to further certify to the court whether, in his opinion, such person is the probable potential parent of mentally incompetent or socially inadequate offspring likewise afflicted.

FINDING OF COURT—RIGHT OF APPEAL. Sec. 2. Upon the hearing of such application for commitment, evidence may be submitted as to whether the best interest of society and of such insane person will be served by his or her sexual sterilization; and if the court shall find that such person is insane and should be committed to the custody of such institution for the insane, it shall further find whether the welfare of society and of such insane person will be promoted by his or her sexual sterilization, the finding of the court being either that sexual sterilization is unnecessary or that the best interest of society and of such insane person will be served by his or her sexual sterilization. And if the court shall find that the best interests of society and of such insane person will be served by his or her sexual sterilization, the court, as a part of the judgment and decree committing such insane person to such institution, shall authorize the superintendent of the institution to which such insane person is committed to have performed upon such insane person the operation of vasectomy, if a male, and of salpingectomy, if a female, or any other more suitable operation or treatment having full sterilizing results, which authorization shall be set forth in the order of commitment, a copy of which, under the seal of the court, shall be forwarded to such superintendent along with other required papers in the case. Such insane person, by his or her guardian, parent or next friend, may, within thirty days after judgment, appeal as in other civil proceedings, from the finding and judgment of the court authorizing such operation of sterilization, and the pendency of such appeal shall stay the performance of such operation of sterilization until the appeal be determined. Upon the filing of notice of appeal, the clerk of the court in which such notice is filed shall forthwith forward by mail to the superintendent of such institution, written information of the filing of such notice of appeal.

OPERATION TO BE PERFORMED. Sec. 3. Whenever any insane person upon whom the operation of sexual sterilization shall have been authorized, as herein provided, shall have been admitted to an institution for the insane, the superintendent thereof, at such time as he may deem expedient and when in his judgment the general health of such insane person will not be affected thereby, and not less than thirty days after such insane person has been received at such institution, shall have performed upon such insane person, by a competent and licensed physician and surgeon, the operation of vasectomy, if a male, and salpingectomy, if a female, or any other more suitable operation or treatment having such sterilizing results.

REPORT TO DEPARTMENT OF PUBLIC WELFARE. Sec. 4. It shall be the duty of the superintendent of such institution for the insane, whenever an operation for the sexual sterilization of an insane person shall have been performed, under the provision of this act, and within ten days thereafter, to make a report thereof to the secretary of the Department of Public Welfare, or its successor, which report shall set forth the name and age of the person upon whom such operation was performed, and the county from which such person was committed, the date of such commitment, the date of admission to the institution, and the date of such operation.

PERSONS IN CHARGE—NON-LIABILITY. Sec. 5. Neither the superintendent, nor the attending physician or surgeon, nor any other person legally participating in the execution of the provisions of this act shall be liable civilly on account of such participation.

CONSTRUCTION OF ACT. Sec. 6. The provisions of this act shall not be construed as conflicting with nor superseding the provisions of the act approved March 11, 1927, entitled "An Act to provide for the sexual sterilization of inmates of state institutions in certain cases," which act shall remain in full force and effect, but are intended as a separate and additional method of procedure.

INSULIN FOR INDIGENT DIABETICS

Preparations for putting into effect the new 1935 law relative to the distribution of insulin to diabetic persons who are unable to purchase this medicine for themselves are being made by Dr.

Verne K. Harvey, director of the state department of public health.

Blanks for use of physicians applying for insulin have been prepared by Dr. Harvey and are being distributed to county health officers and city health departments. Physicians who are in charge of indigent patients in need of insulin may obtain the blanks from these sources, Dr. Harvey explains.

The new law provides that each Indiana township is authorized to supply insulin free of charge to citizens who are found to be in need of insulin treatment for diabetes and who are financially unable to purchase it. Cost of the insulin is paid from the township general fund and no appropriation for that specific purpose is required.

The physicians themselves are responsible for the decision as to whether or not a patient is financially unable to pay for the required insulin. In filling out blanks for obtaining the free insulin, the doctors take the following affirmation: "I solemnly affirm that the free insulin herein applied for is to be used for the person named above, and it is my belief, after inquiry, that such patient is financially unable to pay for the same."

Administration of the law, while it provides for local payment of the cost, has been placed in the hands of the state division of public health.

One part of the blank which must be filled out by the physicians applying for free insulin is retained by the department. This, Dr. Harvey pointed out, will give some valuable statistics on the prevalence of diabetes. At present there are no available statistics on this disease except as to the number of deaths caused annually by it. The record, since it will show only the indigent cases, will naturally be incomplete, Dr. Harvey explained, but it will at least give an indication of its prevalence.

A total of 5,000 blanks have been prepared, and are being distriubted, but, Dr. Harvey said, this was only an arbitrary number decided upon for the first printing. There is no possible way to determine without experience the number of indigent persons suffering from diabetes.

Under the old law indigent persons could obtain free insulin only under the general law which made township trustees responsible for giving medical relief to the township poor. A sufferer was required to declare himself a pauper to obtain free medical treatment of any kind. Under this new set-up no such declaration is needed. Any family physician can prescribe insulin to a patient and sign his card for obtaining the medicine free, if, in the opinion of the physician, the patient is "unable to pay for the same."

Insulin, a specific for diabetes, keeps the patient sugar-free. "If patient is badly in need of insulin and can get it, it will keep him on his feet and may keep himself and his family off relief," Dr. Harvey said.

Treatment of diabetic patients, in the opinion of Dr. Harvey, however, is not strictly a public health problem. His department, however, was charged by the Legislature with administering the law and providing the blanks.

Dr. Harvey prepared and issued the blanks after receiving an opinion from Philip Lutz, Jr., attorney general, which said that the health department was required, by the 1935 acts, to do so. The opinion was asked by Dr. Harvey before he proceeded. The insulin, under the new law, is to be distributed in the same manner as anti-toxins and other medical supplies of that nature are supplied, under the 1901 laws.

The economic aspect of insulin distribution to the poor was discussed by Albert F. Walsman, member of the state board of tax commissioners and formerly a trustee of Center township, Marion county. Calling upon his experience in dealing with the impoverished classes while trustee, Mr. Walsman said that this possible free treatment will be of untold benefit.

"There is the greatest difficulty in determining just who are really 'unable to pay'—as the law sets out—and those who are," Mr. Walsman said. "In my opinion many persons, who are able to buy food and clothing, and apparently are entirely self sustaining, ought to come under this provision.

"It certainly is cheaper to the townships, and a much more human thing to do, to provide free insulin to diabetics even in border line cases, than to withhold it," Mr. Walsman said.

"Without this treatment, as I understand it from Dr. Harvey, a patient may become entirely useless from an economic and producing point of view, whereas, if he had it, he would be able to work. What is the point, then, in withholding the free insulin where there is a possibility of keeping a man self-supporting, and keeping himself and his family from sliding into the ranks of charity cases?"

Reports of the state health department showed a total of 617 deaths resulting from diabetes in 1934. For previous years the record showed: 499 for 1933; 532 for 1932; 555 for 1931; 521 for 1930; 490 for 1929; 519 for 1928; 478 for 1927; 464 for 1936; 445 for 1925; 439 for 1924; and 516 for 1923.

GRADE CROSSING ACCIDENTS

Accidents at railroad and interurban grade crossings resulted in 155 deaths in Indiana during the fiscal year which ended June 30, according to a report issued by Ray Gilbert, chief railway inspector for the public service commission.

A total of 138 persons were killed and 354 injured in accidents at railroad crossings; 17 were killed and 27 injured in accidents at electric railroad crossings. This was an increase of 2 deaths and 19 injuries at railroad crossings, but a decrease in both deaths and injuries at electric railway crossings, as compared with the previous year.

Twenty-seven were killed and 17 injured in the preceding year in electric railway crossing accidents.

According to the report there are 2,700 crossings which are protected, while 10,083 are unprotected.

Only 4 passengers on steam roads were killed during the year and there were no deaths to electric line passengers. A total of 33 passengers on steam roads were injured and 19 on electric lines.

Accidents to persons trespassing on railroad tracks resulted in 99 deaths and 75 injuries, according to the report.

WARDS OF THE STATE GOVERNMENT

Persons suffering from one form or another of mental disease made up by far the greatest number of wards of the state government during the past fiscal year which ended June 30, according to the annual report of the department of public welfare.

The report showed that there was a total of 19,343 inmates in all state institutions on June 30. Of this total, 10,668 were patients at five hospitals for the insane, the school for feeble-minded youth, the epileptic village, and the colony for feeble-minded at Butlerville.

The second largest group of state wards were prisoners in the six penal institutions, including the boys' and girls' schools. There were 2,465 in this group.

Schools, hospitals, and homes had a population of 2,465 on the last day of the fiscal year according to the report. The physically unfit or handicapped made up the greater part of this group. There were 202 persons in the state tuberculosis hospital at Rockville; 433 in the school for the deaf and 133 in the school for the blind, both in Indianapolis. The Indiana University hospitals had a population of 422 on the date the census was taken, but this number naturally changes from day to day.

Taking the entire group of twenty state institutions, the male population was considerably greater than the female population, a total of 12,390 men and 6,953 women being present when the census was taken. In the group of mental institutions the male population was 5,373 of the total population of 10,668. In the homes, schools and hospitals group the male population was 1,219 of the total of 2,465. While in the penal institution group the male population was 5,798 of the total of 6,210.

A comparison of the population on basis of race showed that there were 17,676 whites and 1,667 colored persons in the institutions.

Another interesting comparison is made possible by the report. This is relative to the ages of patients in the institutions for mental cases. The total population was divided as follows: Under 20 years, 1,080; between 20 and 30 years, 1,301; between 30 and 40 years, 1,744; between 40 and 50 years, 2,080; between 50 and 60 years, 1,626; over 60 years, 2,387, and unknown age, 50.

During the fiscal year a total of 16,480 new inmates were admitted. Of these 1,881 were received at the hospitals for mental cases; 8,724 at the homes, schools and hospitals, and 5,895 at the penal institutions.

PERMITS TO PRACTICE

Following is a list of temporary permits issued to reciprocity applicants, also permanent certificates, for the three-months' period ending June 30, 1935:

Temporary Permits:	Date Issued
Strayer, Joseph W.	4/19/35
Downing, Robert Elisha	4/25/35
Simonsen, Marie N.	4/26/35
Ameter, Russell K.	5/1/35
Babienco, Axentie T.	5/6/35
Logan, Catherine E.	5/15/35
Sandorf, Marvin H.	5/15/35
Wallace, Hawthorne C.	5/15/35
Price, Sidney	5/15/35
LeMaster, Ralph E.	5/15/35
Clark, William H.	5/15/35
Seyler, Anna Grace	5/18/35
Jackson, Helen Lucile	5/15/35
McCormick, Wilbur C.	5/22/35
Callison, William Edgar	6/3/35
Springstun, Walter R.	6/8/35
Griffin, Edna L.	6/12/35
Heard, Albert	6/12/35

Permanent Certificates:	Date Issued
Wilber, Harold R.	4/5/35
DeNaut, James Francis	5/17/35
Faul, Henry Jacob	5/24/35
Littig, Amy L.	5/27/35
Sneary, Kenneth D.	6/22/35
Dobbins, Thomas	6/29/35

ABSTRACT

PASSIVE IMMUNITY IN INFANTS AND THEIR RESPONSE TO DIPHTHERIA TOXOID

JOSEPH GREENGARD and HAROLD BERNSTEIN, Chicago (*Journal A. M. A.*, Aug. 3, 1935), made preliminary Schick tests on seventy-four infants. Vaccination with diphtheria toxoid was carried out in both the positive and the negative reactors. The negative reactors, i. e., those who still retained their passive immunity, demonstrated a positive Schick test in two thirds of the cases, the course of their passive immunity corresponding closely to that of infants who have not been vaccinated. The positive reactors, control series, turned negative and remained so in 88 per cent of the cases. The authors therefore conclude that passive immunity in infants interferes with the development of antitoxin in response to vaccination with diphtheria toxoid. Such vaccination, therefore, should not be done in young age groups without preliminary Schick testing.

DIPHTHERIA DEATHS FOR JULY, 1935

There were three deaths from diphtheria during the month of July, one each from Dearborn, Grant and Clinton counties. Dearborn and Clinton counties entered the list for the first time this year.

Interesting is the fact that all three persons died of laryngeal diphtheria, a form of the disease which strikes quickly and kills frequently unless very prompt attention is given. Also very interesting is the age of the children, being respectively nine months, two years, and three years. This again emphasizes the necessity of protecting the preschool child. Unless contrary to the indications, every child should receive immunization treatment by the time he is six months old.

The three deaths for the month of July bring the total to forty-eight for the first seven months of the year, which number is one above that for last year, which is the lowest previous figure. Whether or not we equal or improve upon last year's figures depends upon what happens during the next four months. Last year seventy of the one hundred twenty deaths occurred during the last one-third of the year.

NOW IS THE TIME TO PREVENT DIPHTHERIA DEATHS!

A list showing distribution of the deaths for the year and for the month of July, 1935, is given below:

County	No. Deaths July, 1935	Total for 1935
Allen	0	7
Boone	0	2
Bartholomew	0	1
Clinton	1	1
Crawford	0	1
Dearborn	1	1
Delaware	0	1
Elkhart	0	1
Grant	1	2
Fayette	0	1
Jackson	0	1
Lawrence	0	2
Lake	0	1
LaPorte	0	1
Madison	0	1
Marion	0	14
St. Joseph	0	2
Spencer	0	1
Steuben	0	1
Tippecanoe	0	2
Vigo	0	1
Wayne	0	1
Knox	0	1
Warrick	0	1
Total	3	48

THURMAN B. RICE, M. D., Chairman,
Diphtheria Prevention Committee.

SECRETARIES' COLUMN

Remember the date—October 8, 9, 10, at Gary.

The President has allotted $3,450,000 for 3,500 white collar workers on relief to make a health survey in nineteen states under the supervision of the United States Public Health Service. This survey is to tabulate the illnesses in families that do not get in the hospitals. It is believed that this record will be of value in the study of many diseases and that it will show a greater prevalence of a number of diseases not shown by hospital records.

The Social Security Act has become a law. Study your local conditions and see how the law applies to your locality.

Every secretary and township trustee in the state has received the blue bound book from the Governor's Committee on Unemployment Relief. Study the contents and have the medical work in your county for the indigents done according to the law. There is a benefit in this for you.

Why not have a health show in your county? One county in this state is going to put on a three day health show in conjunction with the State Department of Health. Educate the people. Give them truthful information and let the public know that the County Medical Society is the sponsor.

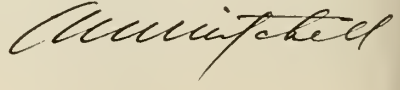
A vacation is a good investment for everyone. The dividends are big.

The next Secretaries' Conference in January, 1936, should be larger and better than the last one. Have you any suggestions to offer? Let's have them now.

I am convinced that the Division of Public Health should be termed the Department of Health and should be a separate unit in the state government and not a division of some other department.

Have you received a letter from the Underwriters Bureau in Kansas City, Missouri, wanting you to enroll in their registry of approved physicians for insurance and casualty work? The fee for this registration is $10, according to one of the physicians who was contacted by their representative. I do not believe it is necessary for any insurance company to have to resort to a directory to pick good men for their work. Nor should it be necessary for any good physician to enroll in this directory to get work.

Will see you in Gary October 8, 9, 10.



DEATH NOTICES

MARY THAYER RITTER, M. D., of Angola, widely known physician who had practiced in Steuben County for thirty-three years, died July nineteenth, aged sixty-five years. Dr. Ritter found time, in spite of a large practice, to carry a number of civic responsibilities and was a leader in several women's organizations. She was secretary of the Steuben County Medical Society at the time of her death and was a member of the Indiana State Medical Association, the Medical Women's National Association, and a fellow of the American Medical Association. Dr. Ritter graduated from the Medical College of Indiana, Indianapolis, in 1903.

ELIHU P. EASLEY, M. D., of New Albany, died August second, aged eighty-seven years. Dr. Easley began the practice of medicine in New Albany soon after his graduation from the University of Louisville School of Medicine in 1872. He was a charter member of the Floyd County Medical Society and was an honorary member of the Indiana State Medical Association.

LUTHER S. HIRT, M. D., of Brazil, died July thirty-first, aged sixty years. Dr. Hirt had practiced in Brazil since 1900. He was a member of the Clay County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from New York University, University and Bellevue Hospital Medical College, in New York, 1899.

KELLEY CHARLES FITZGERALD, M. D., of New Harmony, died July thirty-first, aged fifty-one years. Dr. Fitzgerald graduated from the Kentucky School of Medicine, Louisville, in 1906, and following his hospital work located in New Harmony where he remained until the World War. He served in the war in the Medical Corps and attained the rank of captain; he continued his work in the Army Reserve Corps and at the time of his death was a lieutenant-colonel. Dr. Fitzgerald was an ex-president of the Posey County Medical Society and was a member of the Indiana State Medical Association and the American Medical Association.

EDWARD F. SUHRE, M. D., of Forest, died August twelfth, aged sixty-six years. Dr. Suhre graduated from the Central College of Physicians and Surgeons, Indianapolis, in 1897.

MAHLON M. WALL, M. D., Marion, died August seventh, aged eighty-six years. Dr. Wall had retired from practice. He was a former Grant County clerk. He graduated from the Hahnemann Medical College and Hospital, Chicago, in 1881.

RALPH M. BOLMAN, M. D., prominent physician of Fort Wayne, died August nineteenth. Dr. Bolman graduated from the Fort Wayne College of Medicine in 1905. He was a member of the Allen County Medical Society, the Indiana State Medical Association, and a fellow of the American Medical Association.

HOOSIER NOTES

DR. JOHN KINNEMAN of Goodland has retired from active practice.

DR. J. W. BOWERS of Fort Wayne is taking postgraduate work in Vienna.

DR. BO MARTIN has located in LaPorte where he will conduct a general practice.

DR. FRANK T. DENNY of Gary has taken over the office of Dr. E. C. Lidikay of Ladoga.

DR. H. D. TRIPP has moved from Kewanna to Royal Center where he has opened offices.

DR. CATHERINE LOGAN has opened an office in Monticello where she will practice medicine.

DR. A. NAFICY of Persia recently visited in Indianapolis, spending some time at the University Hospitals.

DR. A. B. CRAY of Monticello has announced that Dr. Charles O. Holder is associated with him in his practice.

DR. B. G. KEENEY of Shelbyville addressed members of the Shelbyville Lions Club at their August twelfth meeting.

MISS LAVERNE FREEMAN of Bloomington and Dr. Kenneth Kohlstaedt of Indianapolis were married July fourteenth.

THE fifth convention of the Biological Photographic Association will be held September twelfth at the Stevens Hotel, Chicago.

DR. DONALD I. DEAN has announced the opening of an office at Rushville. Dr. Dean will specialize in ophthalmology and otolaryngology.

DR. F. MCH. BEELER, who has practiced for twenty-five years in Clinton, has moved to Indianapolis where he will continue his practice.

DR. C. E. STONE of Bedford has opened an office at 1723 M Street. Dr. Stone has been on duty with the CCC camps for several months.

DR. E. L. CARTWRIGHT of Fort Wayne was made a fellow of the American Proctologic Society at the Atlantic City meeting of that organization.

DR. H. R. WALLIN of Martinsville addressed the Columbus Rotary Club, August twelfth, on the subject "Are Three Generations of Imbeciles Enough?"

THE American Psychiatric Association has announced the removal of its offices to the New York Academy of Medicine, 2 E. 103rd Street, New York City.

DR. KATHERINE JACKSON, who has been practicing in Huntertown and Fort Wayne, has taken over the professional practice of the late Dr. Mary Ritter of Angola.

DR. JOHN S. WOOLERY, son of Mrs. Perry Woolery of Bedford, has opened an office for the practice of medicine in the Citizens National Bank Building in Bedford.

DR. IRA LECKRONE of Silver Lake has retired from active practice after thirty-seven years of service in that community. Dr. E. V. Herendeen has taken charge of his practice.

AT a special meeting of the Steuben County Medical Society, held August second, Dr. S. S. Frazier of Angola was elected to succeed Dr. Mary Ritter as secretary-treasurer of the society.

DR. W. D. BUCHANAN of Bremen addressed the members of the Bremen Kiwanis Club, August sixth, presenting a story of the achievements of the Indiana University Medical Center in Indianapolis.

DR. HERBERT SPENCER GASSER, professor of physiology, Cornell University Medical College, has been appointed director of Rockefeller Institute to succeed Dr. Simon Flexner, who will retire in the autumn.

THE American Congress of Physical Therapy will conduct an instruction course September 5, 6, 7, and will hold its annual session September 9, 10, 11, and 12, 1935, at the Hotel Kansas Citian, Kansas City, Missouri.

DR. ROBERT E. HILL, graduate of the Indiana University School of Dentistry in 1927 and of the Indiana University School of Medicine in 1934, has located in Muncie, where he is associated with his father, Dr. Frank E. Hill.

DR. HENRY W. GREIST, the Point Barrow, Alaska, physician who was called upon to care for the bodies of Will Rogers and Wiley Post, is a native Hoosier, and for many years has been a member of the Indiana State Medical Association.

THE immunization drive of the Fort Wayne Medical Society and the city board of health still is being carried on. According to newspaper reports the nurses on the project have made 23,382 visits in the survey since May sixth of this year.

THE leniency petition of Dr. Nelson B. Ross, Muncie physician, who is now serving a life term in the Indiana State Prison, will be considered during the September meeting of the State Clemency Commission. Eight previous petitions have failed.

DR. W. S. DININGER has opened a new office at 303 S. Main Street, Winchester, the former location of Dr. O. W. Hinshaw. Dr. William Callison is moving from Hamilton, Ohio, to Dr. Dininger's old location at 134 E. Franklin Street in Winchester.

A DIPHTHERIA immunization program for children entering public schools this fall is being sponsored by the Delaware-Blackford County Medical Society. The campaign is a forerunner of the general child health program to be carried on later in the fall.

DR. C. H. PROUDFIT has opened offices in Mishawaka and Osceola for the practice of medicine. In Mishawaka Dr. Proudfit is associated with Drs. M. D. Wygant and W. L. Spalding, and in Osceola he has reopened the office of his father, the late Dr. Louis Proudfit.

DRS. R. L. SENSENICH and Donald Grillo of South Bend were speakers before civic clubs in South Bend in connection with a city health campaign, August fifteenth. Dr. Sensenich addressed the Y. M. C. A. Men's Club and Dr. Grillo talked before the Kiwanis Club.

DR. THOMAS B. NOBLE, JR., of Indianapolis, has been appointed director of first aid of the Indianapolis Chapter, American Red Cross. Dr. Noble succeeds Dr. Herbert T. Wagner, who died several months ago. Dr. Noble has assumed his duties and has planned first aid activities for the Red Cross Hospital at the Indiana State Fair.

MEMBERS of the Montgomery County Medical Society, at a meeting held July twenty-fifth, voted to adopt a plan to become an organized division of the Crawfordsville Chamber of Commerce. This group will serve as a separate group from the county medical society, and its activities will be centered on the business problems of the profession.

THE Association of Military Surgeons of the United States will hold its forty-third annual convention at the Waldorf Astoria Hotel, New York City, October 3, 4, and 5. Members of the Indiana State Medical Association are invited to attend. H. L. Gilchrist, Major General, U. S. Army Ret., is secretary of the organization at Washington, D. C.

DR. WERNER W. DUEMLING of Fort Wayne has been elected president of the board of control of the Fort Wayne Medical Society and editor of the monthly journal, "Caduceus," which will be published jointly by the society, the Fort Wayne Academy of Medicine and Surgery, and the Isaac Knapp Dental Society. The first issue is to appear in September.

THE United States Civil Service Commission announces open competitive examination for public health specialists, applications for which positions must be on file with the U. S. Civil Service Commission in Washington, D. C., not later than September 9, 1935. Positions include several grades of bacteriologist, cytologist, epidemiologist, and mycologist (medical) position, and the position of senior pathologist (medical).

DR. HENRI COUTARD, chief of the department of roentgentherapy of cancer at the Curie Institute, University of Paris, France, will deliver the twelfth Lewis Linn McArthur lecture of the Frank Billings Foundation of the Institute of Medicine of Chicago in the theater of the Chicago Woman's Club, 72 East Eleventh Street, at eight o'clock on Tuesday evening, October 1. The subject of his illustrated lecture will be "The Conception of Periodicity as a Possible Directing Factor in the Roentgentherapy of Cancer."

STATE FAIR EXHIBIT

VISITORS to the Indiana State Medical Association's exhibit at the Indiana State Fair this year may have a free examination for overactive goiter. Pamphlets dealing with the subject of goiter will be distributed free and a physician will be in attendance to answer questions and supervise the tests. Exhibits dealing with heart disease and the common cold also will be displayed. Increasing interest has been exhibited in these demonstrations the past few years and interesting results have been reported. Data from this year's tests will probably be published in the October issue of THE JOURNAL.

DR. ALBERT MITCHELL is chairman of a committee to prepare a program for a three-day institute on public health, to be given in Terre Haute, October 29, 30, and 31, under the auspices of a group of representatives of service clubs, the Ministerial Association, the Vigo County Medical Society and Auxiliary, the Public Health Nursing Association, the Woman's Department Club, Altrusa Club, Terre Haute Federated Club, Vigo County Tuberculosis Society, American Legion and Auxiliary, and other organizations. There will be lectures on cancer, heart diseases, communicable diseases, prenatal and postnatal care in maternity cases, and other subjects of interest to the general public.

WEEKLY, national, and state reporting services on the situation regarding the spread and control of poliomyelitis are available through the office of Dr. Verne K. Harvey, director of the Indiana State Division of Public Health. A national weekly service has been started by H. S. Cumming, surgeon-general of the United States Public Health Service. It reported the number of poliomyelitis cases in states having more than six cases in the week ended August tenth; Indiana was not one among them. According to statistics released by Dr. Harvey for Indiana, there is no

cause for alarm in this state and there is no indication of any spread of the disease. For the week ended August tenth, the U. S. Surgeon General's report gave the number of cases in various states as follows: California, 20; Connecticut, 22; Illinois, 13; Kentucky, 15; Maryland, 6; Massachusetts, 74; Michigan, 14; New Jersey, 13; New York, 158; North Carolina, 26; Pennsylvania, 8; Rhode Island, 8; Virginia, 81; West Virginia, 6.

INTERSTATE POSTGRADUATE MEDICAL ASSOCIATION OF NORTH AMERICA

THE International Assembly of the Interstate Postgraduate Medical Association of North America will be held in the Masonic Temple, Detroit, Michigan, October 14, 15, 16, 17, and 18, 1935, with pre-assembly clinics on Saturday, October 12, and post-assembly clinics Saturday, October 19, in the Detroit hospitals. The association, through its officers and members of the Program Committee, extends a cordial invitation to all physicians in good standing in their state and provincial medical societies to attend the assembly. An unusual clinical and didactic program, including all branches of medicine and surgery and the specialties, has been arranged by the Program Committee. In cooperation with the Wayne County Medical Society and the Michigan State Medical Society, and with the active support of the Detroit Convention and Tourist Bureau and the Detroit Board of Commerce, excellent opportunity for an intensive week of postgraduate medical instruction is offered by a large group of acknowledged leaders in the profession. A list of distinguished teachers and clinicians who will take part on the program appears on page xxxv of the advertising section of this JOURNAL. Registration fee of $5.00 admits all members of the profession in good standing. Officers of the association are Dr. Charles H. Mayo, president, Rochester, Minn.; Dr. George Crile, chairman, Program Committee, Cleveland, Ohio; Dr. William B. Peck, managing director, Freeport, Ill.

EXTENSION EDUCATION IN PHYSICAL THERAPY

One of the aims of the Council on Physical Therapy of the American Medical Association is to promote extension education in physical therapy.

The Committee on Education of the Council believes that one of the best ways of extending postgraduate instruction in physical therapy is to arrange for practical talks to be given before state, county, or other medical societies. Experience, especially in New York and Pennsylvania, has shown that such programs are eagerly received by the profession.

The Council is prepared to assist medical societies by furnishing general advice as to programs and by suggesting qualified personnel.

The following topics are offered as being of interest to the general practitioner:

- The Present Status of Physical Therapy.
- Physical Therapy in General Practice.
- Body Mechanics and Posture Training.
- Massage—Indications and Effects.
- Pathological Conditions Helped by Physical Therapy.
- Therapeutic Exercise.
- Radiation Therapy.
- Hydrotherapy.
- Fever Therapy.
- Diathermy, Medical and Surgical, Including Short Wave.

Motion pictures on the following subjects are available for loan:

- Massage—Technic.
- Graduated Active Motion.
- Occupational Therapy.
- Effects of Heat and Cold on Blood Circulation.
- Effects of Massage on Blood Circulation.

In addition exhibits on physical therapy can be arranged in conjunction with the Committee on Scientific Exhibit, available on request.

Anyone desiring help in program planning or loans of films or exhibits is advised to write the Secretary, Council on Physical Therapy, A. M. A., 535 N. Dearborn Street, Chicago, Illinois.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Arzol Chemical Company
- Mercurochrome Applicators

Sharp & Dohme
- Ampules Sodium Cacodylate-Mulford, 2 grains, 1 cc.

U. S. Standard Products Company
- Ampul Solution Sodium Cacodylate 0.2 Gm. (3 grains, 1 cc.
- Ampul Solution Sodium Cacodylate 0.32 Gm. (5 grains), 1 cc.
- Ampul Solution Sodium Cacodylate 0.45 Gm. (7 grains), 1 cc.
- Ampul Solution Sodium Cacodylate 0.2 Gm. (3 grains), 5 cc.
- Ampul Solution Sodium Cacodylate 0.32 Gm. (5 grains), 5 cc.
- Ampul Solution Sodium Cacodylate 0.45 Gm. (7 grains), 5 cc.

The following articles have been accepted for inclusion in the List of Articles and Brands Accepted by the Council But Not Described in N. N. R. (New and Nonofficial Remedies, 1935, p. 445):

U. S. Standard Products Co.
- Physiological Solution of Sodium Chloride—U. S. P., 50 cc. bottle.
- Physiological Solution of Sodium Chloride—U. S. P., 100 cc. bottle.

INDIANA UNIVERSITY NEWS NOTES

THE Indiana University School of Medicine, the Indiana University Hospitals and the School of Dentistry will be represented among the Indiana University exhibits at the Indiana State Fair in Indianapolis, August 31 to September 6, with eight displays and demonstrations in which the importance of good health will be emphasized.

Dr. Thurman B. Rice will have charge of one of the exhibits representing the School of Medicine in which the importance of eradication of rats and other rodents will be emphasized. The health aspects of rats, particularly in food storage rooms and eating places will be pointed out, and various scientific ways of eradication will be shown.

A display of pictures on acid burns will be arranged by James F. Glore, staff photographer, under the direction of Dean W. D. Gatch. Mr. Glore also will be in charge of a booth in which motion pictures of operative technique will be displayed.

Dr. R. N. Harger plans to arrange an exhibit showing the comparative cost of vitamin content in cod liver oil and various advertised products which purport to contain certain vitamins. Dr. Harger's "drunkometer" also will be displayed in connection with a joint exhibit of the Indiana University Institute of Criminal Law and Criminology and the Indiana State Police.

Exhibits from the Riley Hospital will include the display and sale of baskets made during the year in the occupational therapy department under the direction of Miss Winifred Conrick. The dietary department of the Riley Hospital will be represented with an exhibit arranged by Miss Lute M. Troutt, chief dietitian, on the preparation of foods for children. A demonstrator will give lectures on this subject. Miss Cordelia Hoeflin, director of the training school for nurses, is planning a demonstration in the use of the oxygen tent. She will be assisted by Miss Margaret Davenport, assistant director of the training school for nurses.

The School of Dentistry will maintain a dental clinic, and will operate a free clinic for children, making inspections of teeth with recommendations for corrections.

THE Indiana University Medical School library at the I. U. medical center on West Michigan Street, Indianapolis, now is featuring a display of early medical publications in connection with the library's medical museum, according to Allan Hendricks, librarian.

Among the examples of early medical journalism which are being shown are the *Indiana Journal of Medicine and Surgery*, which published two numbers at Madison in 1855. This probably was the second purely local medical journal to be started in this state, Mr. Hendricks reports, the first, and the earliest of three journals bearing the name of *Indiana Medical Journal*, published but one number in Evansville in 1854.

Other publications in the exhibit include the first volumes of the *Medical Repository*, started in 1797 and lasting for 23 volumes, the first American journal of original matter, and the *American Medical Recorder*, which published 15 volumes in the first quarter of the 19th century.

The *Western Quarterly Reporter of Medicine, Surgery and the Natural Sciences*, the first medical journal published west of the Allegheny mountains, and which issued six numbers at Cincinnati in 1822-23, also is shown, as are both of the western journals edited by Dr. Daniel Drake in the 1830's and 1840's. *The Transylvania Journal of Medicine*, the first medical publication of Kentucky, is one of the exhibits.

Other works include the first volumes of the *American Journal of the Medical Sciences*, and two examples of first volumes of chief British Journals, the *Lancet* (1823) and the *British Medical Journal* (1857).

SOCIETIES AND INSTITUTIONS

COUNTY SOCIETY REPORTS

DAVIESS-MARTIN COUNTY MEDICAL SOCIETY members met July thirtieth, in Washington. Dr. J. O. Ritchey of Indianapolis spoke to the group on "Chest Infections." Attendance numbered twenty-four.

* * *

FLOYD COUNTY MEDICAL SOCIETY members were guests at the preventorium for children of the Floyd County Tuberculosis Association, August eighth.

* * *

GIBSON COUNTY MEDICAL SOCIETY members and a number of guests enjoyed a fish fry, August twelfth, on White River near Princeton.

* * *

HENDRICKS COUNTY MEDICAL SOCIETY members met at Danville, July twenty-sixth.

* * *

LAKE COUNTY MEDICAL SOCIETY members held their annual stag picnic and golf tournament at the Turkey Creek Golf Course, August seventh. The program included a golf tournament, quoit pitching, and bridge. Gary physicians won twelve of the twenty-two prizes awarded. Attendance numbered ninety-seven members and guests.

* * *

MADISON COUNTY MEDICAL SOCIETY members were entertained by the Reed Drug Company at their annual party for the physicians, August seventh. Dr. Virgil Simpson of Louisville, Kentucky, was the principal speaker.

GRANT COUNTY MEDICAL SOCIETY members were guests of Dr. H. H. Botts, medical officer in charge, and other officers of the U. S. Veterans' Hospital, at a dinner meeting, July twenty-second.

* * *

WABASH COUNTY MEDICAL SOCIETY met at the Hotel Young, North Manchester, August seventh, with Drs. Balsbaugh, Kiston, and G. M. LaSalle as hosts. Dr. I. E. Perry discussed "Temple Treatment of Eclampsia," and Dr. A. Steffen spoke on "Undulant Fever."

* * *

STEUBEN COUNTY MEDICAL SOCIETY held a special meeting August second. Dr. S. S. Frazier of Angola was elected to fill the office of secretary-treasurer of the society, to succeed Dr. Mary T. Ritter who died July nineteenth.

CASS COUNTY MEDICAL SOCIETY

MEMORIAL TO DR. GEORGE D. MILLER

Because of the important and intimate relationship of the medical profession and the general public, it is deemed fitting that special note be taken of the passing of one of our most worthy members.

Doctor George D. Miller, State Senator, a man of courage, fortitude, charitable ambition and affectionate benevolence, and a long time member and active promoter of the best interests of the Cass County Medical Society, has gone from among us forever, but not so his examples and influences. They are and ever will be with us. Many of his qualities are worthy of sincere emulation. Whatsoever he undertook or thought out to do, was pursued with relentless energy, nothing daunting. All of which accounts, very largely, for the successful culmination of the many projects that eminated from his fertile and energetic mind.

Doctor Miller was of a kindly, sympathetic disposition. Whether agreeing with him or not, in his particular personal feelings, likes or dislikes, one could not but have a kindly and friendly feeling toward him, that being his own constant radiating spirit. Members of the medical fraternity and those of the general public who knew him, especially his confreres, liked him. This was particularly demonstrated by his being elected for twenty-five or more successive years to the office of Secretary of the Cass County Medical Society, in which office he fully demonstrated his powers of leadership.

He served two terms as Coronor of Cass County and eight years as Health Officer for the city of Logansport. At the time of his premature death, he was serving as a State Legislative committeeman for this Society, as well as Councilor for the State's Eleventh Councilor District Medical Association; also as Chairman of the State Society Committee on Credentials, and examiner for several State Boards.

At the time of the last Presidential election, he was chosen by the voters of Cass and Fulton Counties to represent them as State Senator. While doing so, he introduced and aided in the enactment of some very valuable health and other laws, both to the medical profession and general public.

As he was in his political, professional, official and social life, so was he in his private and home life.

It is here that those who know would say that Doctor Miller measured up to his ideals of life more than any where else. It is here where his ambition for the realization of a successful and happy life had its nucleus.

Any one who has had the happy privilege of meeting with him in his home, around his fireside, in the presence of his family, or just with him and his loving and beloved wife, can best testify to the foregoing.

Nowhere, and in no better way have all the things herein related been demonstrated and substantiated, than at his funeral ceremonies given in the Chase Chapel by Tipton Lodge of the Masonic Fraternity, July 22, 1935.

That gathering was one of the most cosmopolitan that has ever assembled in a meeting of like character in the community. The high and the low, the rich and the poor, the learned and the unlearned were there, not with a spirit of selfish curiosity, but simply to do honor to a man who had proved himself to be a friend and helper.

A sorrowing, weeping mother, representing the common people, was heard to say to her children sitting by her side, "Our Santa Claus is gone, I don't know what we will do." And so, many are saying with one accord, "Dr. Miller is gone, I do not know what we will do."

Doctor George David Miller was born of German parentage in Washington township, Cass County, Indiana, August 7, 1873 and died July 19, 1935, from injuries received in an automobile accident the previous day.

He was a member of the Masonic and Eagles lodges.

In consideration of the interest the medical profession of the State, his many friends and his family have in these declarations, we would resolve that a copy of this memoriam be spread on the record in the regular book of the Cass County Medical Society; that a copy be sent to each of the local newspapers, and to the Indiana State Medical Journal for publication, and to his wife, Mrs. Margaret Miller and family.

Respectfully submitted,

CASS COUNTY MEDICAL SOCIETY

Committee:

J. H. REED, *Chairman.*
J. A. LITTLE.
WILL HOLMES.
E. L. HEDDE, *Secretary.*

INDIANA STATE MEDICAL ASSOCIATION

BUREAU OF PUBLICITY

June 28, 1935.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D., and Thomas A. Hendricks, executive secretary.

Release, "A Safe and Sane Fourth," approved for publication in July 3 papers.

Report on medical meetings:

June 5—Woman's Auxiliary to the Madison County Medical Society, Anderson. "Suggestions for the Auxiliary." 75 present.

Letter received from the president of the Mooresville Woman's Club asking for information in regard to speakers sent out by the Bureau of Publicity. The secretary was instructed by the Bureau to answer this letter and supply the information.

Clippings of items regarding cases treated by certain physicians, which appeared in an Indiana paper, brought to the attention of the Bureau. The secretary was instructed to call this to the attention of the officers of the county medical society, the names of whose members were mentioned in these notices of questionable ethical character.

The copy used in a local newspaper advertising campaign by a chain of drug stores in Indiana was brought to the attention of the Bureau of Publicity.

A number of newspaper clippings were reviewed by the Bureau.

July 11, 1935.

Present: William N. Wishard, M. D., chairman; J. H. Stygall, M. D.; E. D. Clark, M. D., and T. A. Hendricks, executive secretary.

Release upon "Appendicitis" approved for publication in Saturday afternoon papers, July 20.

Request for speaker:

Mooresville Woman's Club, Mooresville, Indiana. Speaker to be obtained.

One member of the Bureau was instructed to obtain a statement from a midwestern physician in regard to some work that he has done concerning the ascending heart rate. This member is to analyze the statement in order that a suitable article for publication may be prepared from it.

Letter received from the historian of the Association brought to the attention of the Bureau. The Bureau wishes to express its appreciation for the splendid work that the historian is doing.

Letter from the secretary of the Marshall County Medical Society concerning an advertisement which appeared in a

newspaper of that county brought to the attention of the Bureau. The advertisement reads:

"Specialist
Ear, Eye, Nose and Throat
Eyes Refracted
Glasses Fitted
All Work Guaranteed
at ..... Hotel every Tuesday
....., M. D."

It is the official opinion of the Bureau that such an advertisement is unethical.

Bulletins received from the Public Relations Bureau of the Medical Society of the State of New York.

July 26, 1935.

Present: William N. Wishard, M. D., chairman; J. H. Stygall, M. D., and T. A. Hendricks, executive secretary.

Release, "Public Health Enemy No. 1," approved for publication in Saturday papers, August 3.

Requests for speakers:

July 29—French Lick Kiwanis Club, French Lick, Ind. "Medical Economics." Speaker obtained.

Feb. 24, 1936—Mooresville Woman's Club, Mooresville, Ind. Speaker obtained.

March 23, 1936—Mooresville Woman's Club, Mooresville, Ind. Speaker obtained.

Letter in regard to the activities of the Bureau of Publicity prepared and transmitted to the Ohio State Medical Association.

The following letter, voicing the opinion of the Bureau of Publicity, was sent to the secretary of a county medical society in regard to an advertisement which appeared in an Indiana newspaper:

"Your letter of June 28 was brought to the attention of the Bureau of Publicity at its regular weekly meeting on July 11.

"The Bureau has instructed me to inform you officially that in its opinion the advertisement of Doctor ————, copy of which you sent us, is unethical. According to the Principles of Medical Ethics, the publication only of a simple business card would, under any circumstances, be ethical and then only when it is customary in that locality to publish or circularize such cards. The Principles of Medical Ethics upon this point read as follows:

"The publication or circulation of ordinary simple business cards, being a matter of personal taste or local custom, and sometimes of convenience, is not per se improper. As implied, it is unprofessional to disregard local customs and offend recognized ideals in publishing or circulating such cards.'"

Letters received from the historian of the Association were read.

INDIANA DIVISION OF PUBLIC HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report, July, 1935

Thurman B. Rice, M. D.

Diseases	July 1935	June 1935	May 1935	July 1934	July 1933
Tuberculosis	177	193	179	168	107
Chickenpox	24	89	375	18	24
Measles	89	343	1,089	212	84
Scarlet fever	90	232	451	103	81
Smallpox	7	4	3	0	1
Typhoid fever	28	10	14	55	59
Whooping cough	146	110	245	225	203
Diphtheria	41	51	66	33	46
Influenza	48	27	46	21	49
Pneumonia	33	68	90	10	2
Mumps	33	80	162	6	7
Poliomyelitis	2	2	0	2	1
Meningitis	7	11	13	0	8
Malaria fever	8	0	0	1	4
Tetanus	2	0	0	0	0
Encephalitis	1	1	0	0	0

NEW REGULATIONS CONCERNING INJURED EMPLOYEES OF WORKS PROGRESS ADMINISTRATION

(Reprinted from the *Journal of the A. M. A.*, August 3, 1935)

The Emergency Relief Appropriation Act of 1935 provides that the provisions of the Federal Employees' Compensation Act are extended, as far as applicable, to employees of the Federal Civil Works Administration for disability or death resulting from traumatic injury sustained while in the performance of duty. Traumatic injury includes "only injury by accident causing damage or harm to the physical structure of the body and shall not include a disease in any form except as it shall naturally result from the injury."

The administration of the Federal Employees' Compensation Act is vested in the United States Employees' Compensation Commission, Washington, D. C., the commission being authorized to make necessary rules and regulations for the carrying out of the purposes of the act. Pursuant to this authority, the commission, July 15, 1935, promulgated Rules and Regulations No. 1, Governing Compensation and Medical Expense for Works Progress Administration.

Summary of Rules and Regulations No. 1

The term "employee" includes only persons receiving security payments or wages from funds made available by the Emergency Relief Appropriation Act of 1935 for services rendered as employees of the United States. The term "physician" includes only graduates of a recognized medical school with a degree of M. D. who are licensed to practice medicine in the state in which they reside. The term "state compensation officer" as used in the regulations refers to the person on the staff of each State Works Progress Administrator who is charged with the duty of supervising the handling of compensation claims.

Medical Treatment

Employees of the Works Progress Administration who suffer a traumatic injury while in the performance of duty, whether or not disability arises, are entitled to necessary medical and hospital care. Treatment will not be authorized for illness or disease in any form except as it may naturally arise from a traumatic injury by accident, causing harm or damage to the physical structure of the body. No provision is made for medical examinations to determine employees physical qualifications for work.

Where practical, medical treatment is to be furnished by federal medical establishments, but these facilities may not be utilized to the exclusion or disadvantage of any other beneficiary for whom they have been specifically provided. Where federal medical facilities are not available, or where such facilities are inadequate to furnish the necessary services, the state compensation officer or his local representatives are authorized to make arrangements for medical care by reputable private physicians.

Medical fees are to be paid at rates not in excess of the minimum charges prevailing in the community for similar services. The regulations provide that the state compensation officer or his local representatives should contact the local medical societies to enlist their cooperation in selecting physicians in the locality who are especially well qualified to render services in industrial accident cases and who desire to render such service to employees of the Works Progress Administration, under the regulations of the commission. The fact that a physician, otherwise qualified, is not a member of a medical society is not to be considered in a way discriminatory to him. Compensation cases are to be distributed among physicians in as equitable a manner as possible.

A physician authorized to treat an injured employee may select the institution in which a patient is to be hospitalized, provided such instituton agrees to the approved schedule of rates. The commission has agreed with representatives of the national hospital associations on basic rates with general hospitals for services to Works Progress Administration employees. The commission reserves the right to have its medical representatives examine patients and their records at the hospital and to cause a patient's removal for sufficient reason.

Authority for Treatment

Where there is no doubt concerning the right of an employee to receive medical care, special form CA-16, or a letter containing the information required by that form, must he issued by the person in charge of a project or the compensation representative, in sending an injured employee to a physician or hospital for treatment. The request is made in duplicate and the original is left with the physician or hospital.

If there is doubt whether or not an employee is entitled to medical and hospital care, the person in charge of the project, or the local compensation representative, should send the employee for an examination, using special form CA-17. If the examination discloses that the employee is not entitled to treatment, the local compensation representative or other person who issued form CA-17 should immediately notify the physician or hospital that no treatment should be rendered for the account of the commission. If the local compensation representative is in doubt concerning the matter, he is to refer all details and circumstances to the state officer for advice. If the state officer entertains doubt, he is to refer the facts to the commission, at Washington, D. C., for decision. Form CA-17 authorizes necessary emergency treatment.

Form CA-16, or form CA-17, is the physician's authority for rendering services for the account of the commission, and bills cannot be paid in the absence of such authority. The regulations provide that authorization for treatment of an injured employee should not be issued to more than one physician; if a second physician is necessary, the attending physician has full authority to procure such assistance as he may deem necessary. If, however, a change of physicians becomes advisable, authority for treatment is to be issued to the physician to whom the case is transferred.

Authorization for treatment, the regulations provide, should be issued on the date of the injury or on the date the employee applies for treatment and should be sent to the physician at the time the employee is referred for treatment. Emergency cases may be referred before the issuance of form CA-16, provided the form is issued within forty-eight hours thereafter. When it is not practical to observe this requirement, the delay in issuing authorization must be explained —otherwise payment for medical services may be refused. All authority for treatment or hospitalization should be signed personally by the issuing officer. The name of the issuing officer typed on the form is not to be considered valid authority.

Attending physicians may engage special nursing service when such care is absolutely essential, without written authorization by the compensation officer. The commis ion's allowance for hospitalization covers all general nursing service. The necessity for special nursing must be shown in each case. Vouchers submitted by nurses must contain a certification that they are not employed on a salary basis in the hospital in which the service was rendered, and these vouchers must be approved by the attending physician.

Hernias

Special provisions are embodied in the regulations with respect to hernias. Form CA-17 should be used in all hernia cases. In general, no hernia operation is to be authorized by the state compensation officer, but such cases must be reported to the commission at Washington for authorization to proceed with the operation. In an emergency, however, "due to strangulation or incarceration," when it is clear that the complication is due to injury on a Works Progress Administration project, an emergency operation may be authorized locally. The provisions of the commission's general regulations promulgated under the Federal Employees' Compensation Act, relating specifically to hernias, are made applicable to cases of hernias developing in connection with the Works Progress Administration activities.

Preparation of Vouchers for Medical and Hospital Service

Bills for medical and hospital services are to be submitted on form S-69 and supported by proper written authority authorizing such service, either special form CA-16 or CA-17 as the case may be, unless such authorization has previously been forwarded to the commission. A separate voucher must be submitted by each payee for services to each indigent employee.

Vouchers should be verified by the signature of the injured employee. Vouchers from physicians and hospitals on form S-69 should be submitted when the employee is discharged from treatment except when hospitalization or treatment extends more than thirty days, in which case the vouchers should be submitted at the end of each thirty-day period with a complete report from the attending physician showing the condition of the employee, the diagnosis and prognosis, and recommendations with reference to any future medical care.

Vouchers Submitted by Physicians

The following specific instructions should be followed by physicians, in submitting voucher form S-69: (*a*) All charges must be itemized to show specific dates on which treatments were rendered, the charge for each treatment and a concise description of the injury for which treatment was rendered. (*b*) X-ray charges should be itemized so as to show the dates on which made, number of views, parts of the body roentgenographed, and the charge for each service. (*c*) Joint accounts will not be authorized for payment. If the service of an assistant or consultant is required, the assistant or consultant must submit a separate voucher. (*d*) Physicians and hospitals must not submit a combined account. (*e*) Vouchers from physicians shall include a separate charge for drugs and must show whether such drugs were supplied from personal stock. If not, a receipted bill supporting the charge must accompany the voucher. All charges for drugs must be itemized.

Vouchers for Hospital Service

The following specific instructions must be followed in submitting voucher form S-69 for authorized hospital service: (*a*) Payment will be made for the day of admission but not for the day of discharge from the hospital, and vouchers should be submitted accordingly. (*b*) The per diem rate for hospitalization includes all drugs, dressings and laboratory work. (*c*) Payment for special drugs and supplies authorized by the attending physician will be approved. Whenever extra charges for special drugs or surgical supplies are made, the kind of drugs must be shown on the voucher and, if they are not supplied by the hospital, the amount claimed must be supported by a properly receipted bill. If not supplied from stock or supported by a receipted bill, the cost of the article should not be included in the hospital voucher and the druggist or firm supplying the articles should be instructed to submit a voucher. (*c*) All x-ray charges should be itemized as described in the preceding paragraph. (*d*) Hospitals and physicians must not submit a voucher combining the services of the two. When the physician is owner or part owner of the hospital, and accounts are submitted in the physician's name or in the name of the hospital, a separate voucher must be prepared for each class of service.

In General

The regulations further provide, in detail, for the payment of necessary expenses incurred in the transportation of injured employees for the purpose of obtaining medical treatment, for the filing of reports of injuries, and for the payment of compensation to injured employees or their surviving dependents.

CONSTITUTION AND BY-LAWS OF THE INDIANA STATE MEDICAL ASSOCIATION

The Constitution and By-Laws provides that "the House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates present at any annual session, provided that such amendment shall have been presented in open meeting at the previous annual session

and that it shall have been published twice during the year in THE JOURNAL of this Association." The complete Constitution and By-Laws and proposed changes were published in the September, 1934, issue of THE JOURNAL. It is herewith published again. Paragraphs which are to be replaced are printed in parentheses; paragraphs to be added to the original are so marked.

ARTICLE I.—NAME OF THE ASSOCIATION

The name and title of this organization shall be the Indiana State Medical Association.

ARTICLE II.—PURPOSES OF THE ASSOCIATION

The purposes of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of Indiana, and to unite with similar societies of other states to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state medicine, and public health, so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

ARTICLE III.—COMPONENT SOCIETIES

Component societies shall consist of those county medical societies which hold charters from this Association.

ARTICLE IV.—COMPOSITION OF THE ASSOCIATION

SECTION 1.—This Association shall consist of Members, Delegates, Guests, and Associate and Honorary Members.

(SEC. 2.—*Members.*—The members of this Association shall be the members of the component county medical societies.)

SEC. 2.—*Members.*—The members of this Association shall be the members of the component county medical societies. Membership in a county medical society on a basis not including membership in the Indiana State Medical Association is not recognized.

SEC. 3.—*Delegates.*—Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component societies in the House of Delegates of this Association.

SEC. 4.—*Associate Members.*—Members of the Indiana State Dental Association in good standing are, by virtue of their membership therein, made associate members of the Indiana State Medical Association.

(SEC. 5.—*Honorary Members.*—Honorary members shall consist of representative teachers and students of science allied to medicine and of physicians and surgeons of distinction not members of the Indiana State Medical Association, who may by vote of the House of Delegates be elected to honorary membership; and any physician of the State of Indiana who has attained the age of seventy-five years and has held membership in the Indiana State Medical Association for twenty years or more may be elected to honorary membership by majority vote of the House of Delegates, provided his name be proposed for such honorary membership by the county medical society of which such physician is a member and payment for THE JOURNAL of the Indiana State Medical Association by such county medical society which proposed such name for honorary membership.)

SEC. 5.—*Honorary Members.*—Honorary members shall consist of representative teachers and students of science allied to medicine and of physicians and surgeons of distinction not members of the Indiana State Medical Association, who may by vote of the House of Delegates be elected to honorary membership; and any physician of the State of Indiana who has attained the age of seventy-five years and has held membership in the Indiana State Medical Association for twenty years or more may be elected to honorary membership by vote of the House of Delegates, provided his name be proposed for such honorary membership by the county medical society of which such physician is a member.

SEC. 6.—*Guests.*—Any distinguished physician not a resident of this state who is a member of his own State Association may become a guest during any Annual Session on invitation of the officers of this Association, and shall be accorded the privilege of participating in all of the scientific work for that session.

ARTICLE V.—HOUSE OF DELEGATES

(The House of Delegates shall be the legislative and business body of the Association and shall consist of (1) Delegates elected by the component county societies; (2) the Councilors; (3) the ex-Presidents of the Indiana State Medical Association, and (4) *ex officio* the President, the President-elect, the Executive Secretary, and the Treasurer of this Association, without power to vote, except in case of a tie vote, when the President shall cast the deciding vote.)

The House of Delegates shall be the legislative and business body of the Association and shall consist of (1) Delegates elected by the component county societies; (2) the Councilors; (3) the ex-Presidents of the Indiana State Medical Association; and (4) *ex officio* the President, the President-elect, the Executive Secretary, the Treasurer of this Association, and the delegates to the American Medical Association, all without power to vote, except in case of a tie vote, when the President shall cast the deciding vote.

ARTICLE VI.—COUNCIL

(The Council shall consist of (1) the Councilors, and (2) *ex officio* the President, President-elect, Executive Secretary, and Treasurer. Besides its duties mentioned in the By-Laws, it shall constitute the Board of Trustees of this organization, having full charge and control of all the property of the Association. It shall have full authority and power of the House of Delegates between sessions of the House of Delegates and at all times shall be the finance committee of the Association. Five Councilors shall constitute a quorum.)

The Council shall consist of (1) the Councilors, and (2) *ex officio* the President, President-elect, Executive Secretary, and Treasurer. Besides its duties mentioned in the By-Laws, it shall constitute the Board of Trustees of this organization, having full charge and control of all the property of the Association. It shall have full authority and power of the House of Delegates between sessions of the House of Delegates, except that it shall not make changes in the laws governing the Association nor exercise legislative functions, and at all times shall be the finance committee of the Association. Five Councilors shall constitute a quorum.

ARTICLE VII.—SECTIONS AND DISTRICT SOCIETIES

The House of Delegates may provide for a division of the scientific work of the Association into appropriate sections and for the organization of such Councilor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE VIII.—SESSIONS AND MEETINGS

SECTION 1.—The Association shall hold an Annual Session during which there shall be held daily general meetings and such section meetings as may be provided for, all of which shall be open to all registered members and guests.

SEC. 2.—The time and place for holding each Annual Session shall be fixed by the House of Delegates at the preceding Annual Session.

SEC. 3.—Special sessions of either the Association or the House of Delegates shall be called by the President on petition of twenty delegates or fifty members.

ARTICLE IX.—OFFICERS

(Section 1.—The officers of this Association shall be a President, a President-elect, an Executive Secretary, a Treasurer, and thirteen Councilors.)

SECTION 1.—The officers of this Association shall be a President, a President-elect, an Executive Secretary, a Treasurer, and thirteen Councilors, each of whom shall be a physician in active private practice, except the Executive Secretary, who need not necessarily be either a physician or a member.

(SEC. 2.—The officers, except the Councilors and the Executive Secretary, whose election has been provided for hereinafter, shall be elected annually. The terms of elected Councilors shall be for three years and approximately one-third of the number shall be elected annually. All of these officers shall serve until their successors are elected and installed.)

SEC. 2.—The officers, except the Councilors, shall be elected annually. The terms of elected Councilors shall be for three years and approximately one-third of the number shall be elected annually. All of these officers shall serve until their successors are elected and installed.

(SEC. 3.—The officers of this Association shall be elected by the House of Delegates on the morning of the last day of the Annual Session, but no delegate shall be eligible to any office named in the preceding section, except that of Councilor, and no person shall be elected to any such office who is not in attendance on that Annual Session and who has not been a member of the Association for the preceding two years.)

SEC. 3.—The officers of this Association shall be elected by the House of Delegates on the morning of the last day of the Annual Session, but no delegate shall be eligible to any office named in the preceding section, except that of Councilor, and no person shall be elected to any such office who is not in attendance on that Annual Session and/or who has not been a member of the Association for the preceding two years.

SEC. 4.—The Councilors shall be elected by the respective district societies, providing that if any district shall exist without a society, or if the district society fails to meet and elect its Councilor and notify the House of Delegates before or at the time of the Annual Session, the Councilor for such a district shall be elected by the House of Delegates. Provided further, That if a Councilor district society fails to meet and elect its Councilor, the Councilor for that district shall be elected by the House of Delegates.

ARTICLE X.—RECIPROCITY OF MEMBERSHIP WITH OTHER STATE SOCIETIES

In order to broaden professional fellowship this Association is ready to arrange with other State Medical Associations for an interchange of certificates of membership so that members moving from one state to another may avoid the formality of re-election.

ARTICLE XI.—FUNDS AND EXPENSES

Funds shall be raised by an equal per capita assessment on each component society. The amount of the assessment shall be fixed by the House of Delegates. Funds also may be raised by voluntary contributions, from the Association's publications, and in any other manner approved by the House of Delegates. Funds may be appropriated by the House of Delegates to defray the expenses of the Association, for publication, and for such other purposes as will promote the welfare of the profession. All motions and resolutions appropriating funds must be referred to the Council for approval before final action is taken thereon.

ARTICLE XII.—REFERENDUM

SECTION 1.—A General Meeting of the Association may, by a two-thirds vote of the members present, order a general referendum on any question pending before the House of Delegates, and when so ordered the House of Delegates shall submit such question to the members of the Association, who may vote by mail or in person, and if the members voting shall comprise a majority of all the members of the Association, a majority of such vote shall determine the question and be binding on the House of Delegates.

SEC. 2.—The House of Delegates may, by a two-thirds vote of its own members, submit any question before it to a general referendum, as provided in the preceding section, and the result shall be binding on the House of Delegates.

ARTICLE XIII.—THE SEAL

The Association shall have a common Seal, with power to break, change or renew the same at pleasure.

ARTICLE XIV.—AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates present at any Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been published twice during the year in THE JOURNAL of this Association.

BY-LAWS

CHAPTER I.—MEMBERSHIP

SECTION 1.—Any physician who is a member in good standing of a component county society and who has paid to this Association his annual dues is a member in good standing of the Indiana State Medical Association.

SEC. 2.—No person who is under sentence of suspension or expulsion from a component society, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this Association, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability.

SEC. 3.—Each member in attendance at the Annual Session shall register by indicating the component society of which he is a member. When his right to membership has been verified, by reference to the roster of his society, he shall receive a badge, which shall be evidence of his right to all the privileges of membership at that session. No member shall take part in any of the proceedings of an Annual Session until he has complied with the provisions of this section.

CHAPTER II.—GENERAL MEETINGS

SECTION 1.—All registered members may attend and participate in the proceedings and discussions of the General Meetings and the meetings of the sections. The General Meetings shall be presided over by the President or by the President-elect, and before them shall be delivered the address of the President and the orations, unless the Committee on Scientific Work, with the sanction and approval of the officers, shall arrange otherwise.

SEC. 2.—The General or Section Meetings may recommend to the House of Delegates the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and public.

SEC. 3.—No address or paper before the Association, except those of the President and orators, shall occupy more than twenty minutes in its delivery; and no member shall speak longer than five minutes nor more than once on any subject, except by unanimous consent, except the first discussant, who shall be allowed ten minutes.

SEC. 4.—All papers read before the Association or any of the sections shall become its property and shall not be published in any but the official publications of this Association, except by consent of the officers and the Editorial Board of this Association. Each paper shall be deposited with the Executive Secretary when read.

(SEC. 5.—The Indiana State Medical Association shall appropriate from its funds the sum of Five Hundred Dollars ($500) annually for the entertainment of its members and guests, this money to be expended at the direction of the President, Executive Secretary, and Treasurer of the State Association, and the Chairman of the Entertainment Committee, who is appointed annually by the President of the Association. All money in excess of that expended for actual expenses incurred at that session is to revert each year to the treasury of the State Association.)

SEC. 5.—The Indiana State Medical Association shall appropriate from its funds the sum of Four Hundred Dollars ($400) annually for the entertainment of its members and guests, this money to be expended at the direction of the President, Executive Secretary, and Treasurer of the State Association, and the Chairman of the Entertainment Committee, who is appointed annually by the President of the Association. All money in excess of that expended for actual expenses incurred at that session is to revert each year to the treasury of the State Association.

CHAPTER III.—SECTIONS

SECTION 1.—During the Annual Session the Association may meet in the following sections:

a. Surgical.
b. Medical.
c. Eye, Ear, Nose and Throat.
d. Any other sections that hereafter may be provided for by the House of Delegates.

(SEC. 2.—The officers of each section shall be a Chairman, a Vice-Chairman, and a Secretary, and they shall preside over the meetings of the sections.)

SEC. 2.—The officers of each section shall be a Chairman, a Vice-Chairman, and a Secretary, and

they shall preside over the meetings of the sections and shall be responsible to the Committee on Scientific Work for the section speakers and papers.

SEC. 3.—The election of officers of the sections shall be the first order of business of the last meeting of the sections during the Annual Session.

SEC. 4.—No section meeting shall be allowed to conflict with a general meeting.

CHAPTER IV.—HOUSE OF DELEGATES

(SECTION 1.—The House of Delegates shall meet the day before or during that fixed as the first day of the scientific meeting of the general assembly. It may adjourn from time to time as may be necessary to complete its business, provided that its hour shall conflict as little as possible with the General or Section Meetings. It shall meet on the morning of the last day of the Annual Session for the election of officers for the ensuing year and for the completion of any business previously introduced. The order of business shall be arranged as a separate section of the program.)

SECTION 1.—The House of Delegates shall meet the day before or during that fixed as the first day of the scientific meeting of the Annual Session. It may adjourn from time to time as may be necessary to complete its business, provided that its hours shall conflict as little as possible with the General or Section Meetings. It shall meet on the morning of the last day of the Annual Session for the election of officers for the ensuing year, and for the completion of any business previously introduced. The order of business shall be arranged as a separate section of the program.

(SEC. 2.—Each component county society shall be entitled to send to the House of Delegates each year one delegate for every fifty members and one for each major fraction thereof; but irrespective of the number of members, each component society which has made its annual report and paid its assessments, as provided in this Constitution and By-Laws, shall be entitled to one delegate. The names of duly elected delegates from each component society shall be sent to the Executive Secretary of this Association at least thirty days prior to the date of the Annual Session at which such delegates are to serve. If any component county medical society is without representation at the end of the roll call, then the members registered in attendance from that county may select from their number a delegate to serve until the regular delegate or alternate appears.)

SEC. 2.—Each component county society shall be entitled to send to the House of Delegates each year one delegate for every fifty members and one for each major fraction thereof; but irrespective of the number of members each component society which has made its annual report and paid its assessments, as provided in this Constitution and By-Laws, shall be entitled to one delegate. The names of duly elected delegates and alternates from each component society shall be sent to the Executive Secretary of this Association annually on or before June first prior to the Annual Session at which such delegates are to serve. No one shall be entitled to a seat in the House of Delegates unless his credentials as a delegate or alternate, properly signed by the Secretary and President of his county society, be presented to the Committee on Credentials at the time of the Annual Session. If any component county medical society is without representation at the end of the roll call, then the members registered in attendance from that county may select from their number a delegate to serve until the regular delegate or alternate appears, and any delegate so named must receive a vote of affirmation from the House of Delegates before he can be seated.

SEC. 3.—Twenty delegates shall constitute a quorum.

SEC. 4.—It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

SEC. 5.—It shall divide the state into Councilor Districts, specifying what counties each district shall include, and when the best interests of the Association and profession will be promoted thereby, organize in each district a medical society, and all members of component county societies, and no others, shall be members of such district societies.

SEC. 6.—It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates. Such committees shall report to the House of Delegates, and the members of such committees may be present and participate in the debate on their reports.

SEC. 7.—It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

SEC. 8.—Funds may be appropriated by the House of Delegates, subject to approval by the Council, for such purposes as will promote the welfare of the Association and the profession.

SEC. 9.—At the first meeting the President shall appoint from among the members of the House of Delegates, Reference Committees, as hereinafter provided for, and any other committees considered by him necessary to expedite the business of the Association.

CHAPTER V.—ELECTION OF OFFICERS

SECTION 1.—The election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last day of the Annual Session.

SEC. 2.—All elections shall be by ballot, and a majority of the votes cast shall be necessary to elect. In case no nominee receives a majority on the first ballot, the nominee receiving the lowest number of votes shall be dropped and a new ballot taken.

SEC. 3.—Any person known to have solicited votes for or sought any office within the gift of this

Association shall be ineligible for any office for two years.

SEC. 4.—The term of office, unless otherwise specified, shall be for the fiscal year following the date of election.

CHAPTER VI.—DUTIES OF OFFICERS

SECTION 1.—The President shall preside at all General Meetings of the Association and of the House of Delegates; shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged by the Scientific or Program Committee, and perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the state during his term of office, and as far as practicable, shall visit by appointment the various sections of the state and assist the Councilors in building up the county societies and in making their work more practical and useful.

SEC. 2.—The President-elect shall assist the President in the discharge of his duties. In the event of the President's death, resignation or removal, the President-elect shall succeed him in office.

SEC. 3.—The Treasurer shall give bond at the expense of the Association in such an amount as shall be required by the Council. He shall demand and receive all funds due the Association, except accounts due THE JOURNAL in the conduct of its business, together with bequests and donations. He shall pay money out of the treasury only on a written order by the President, countersigned by the Chairman of the Council. He shall present to the House of Delegates annually a report of the receipts and expenditures, and the state of the funds in his hands, and shall subject his accounts to such examination as the House of Delegates may order.

SEC. 4.—The Executive Secretary shall attend the General Meetings of the Association, and the meetings of the House of Delegates and the Council, and shall keep minutes of their respective proceedings in separate record books. He shall be Secretary of all committees of the Association, assist them in the performance of their duties and keep a record of their proceedings. He shall, under instructions from the Bureau or Committee on Publicity, issue and send to lay publications such educational articles as may be prepared and authorized for general publication, and secure and assign medical speakers to address (on invitation) lay organizations on subjects pertaining to individual or community health. He also shall, whenever requested, assist any of the component societies of the Association in securing speakers or otherwise preparing a program for special meetings; he shall at all times hold himself in readiness to advise and aid, so far as practicable, any and all officers or committees of the Association in the performance of their duties or to carry out any of the purposes or policies of the Association. He shall be custodian of all record books and papers belonging to the Association, except such as properly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Association which come into his hands. He shall be bonded at the expense of the Association in such an amount as shall be required by the Council. He shall provide for the registration of the members and delegates at the Annual Session. He shall, with the cooperation of the secretaries of the component societies, keep a card-index register of all the legal practitioners of the state by counties, noting on each his status in relation to his county society, and, on request, shall transmit a copy of this list to the American Medical Association. He shall report promptly memberships and proceedings or reports of the House of Delegates, the Council, or any committees of the Association to the Editor of THE JOURNAL for publication. He shall aid the Councilors in the organization and improvement of the county societies and in the extension of the power and usefulness of this Association. He shall conduct the official correspondence, notifying members of meetings, officers of their election, and committees of their appointment and duties. He shall employ such assistants as may be ordered by the Council, and shall make an annual report to the House of Delegates. He shall supply each component society with the necessary blanks for making their annual reports; shall keep an account with the component societies, charging against each society its assessments, collect the same, and at once turn it over to the Treasurer. Acting with the Committee on Scientific Work and the Editor of THE JOURNAL, he shall prepare and issue all programs. The amount of his salary shall be fixed by the Executive Committee on approval of the Council.

SEC. 5.—The necessary expenses of the above officers incurred in the line of duty herein imposed may be allowed by the Council, but excepting the Executive Secretary, this shall not include the expense of attending the Annual Session.

CHAPTER VII.—COUNCIL

(SECTION 1.—The Council shall meet as follows: 1. Annually, in December or January. 2. On the day preceding the first day for the scientific meetings of the Annual Session of the Association. 3. On the last day of the Annual Session of the Association. 4. At such other times as necessity may require, subject to the call of the Chairman or on petition of three Councilors. It shall hold no meeting that will conflict with any meeting of the House of Delegates. It shall elect a Chairman; and a Clerk, who, in the absence of the Executive Secretary of the Association, shall keep a record of its proceedings. It shall, through its Chairman, make an annual report to the House of Delegates. Five Councilors shall constitute a quorum for the transaction of business.)

SECTION 1.—The Council shall meet as follows: 1. Annually, in December or January. 2. On the

day preceding the first day for the scientific meetings of the Annual Session of the Association. 3. On the last day of the Annual Session of the Association after the adjournment of the House of Delegates. 4. At such other times as necessity may require, subject to the call of the Chairman, or on petition of three Councilors. It shall hold no meeting that will conflict with any meeting of the House of Delegates. It shall elect a Chairman; and a Clerk, who, in the absence of the Executive Secretary of the Association, shall keep a record of its proceedings. It shall, through its Chairman, make an annual report to the House of Delegates. Five Councilors shall constitute a quorum for the transaction of business.

SEC. 2.—Each Councilor shall be organizer, peacemaker, and censor for his district. He shall visit the counties in his district at least once a year for the purpose of organizing component societies where none exist; for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his work and of the condition of the profession of each county in his district, the same to be published in the number of THE JOURNAL which is issued immediately preceding the Annual Session, and the report should be approved by the House of Delegates, with such recommendations as seem indicated. The necessary expenses incurred by such Councilor in the line of the duties herein imposed may be allowed by the Council on a properly itemized statement, but this shall not be construed to include his expense in attending the Annual Session of the Association.

SEC. 3.—The Council shall, through its officers and otherwise, give diligent attention to and foster the scientific work and spirit of the Association, and shall study and strive constantly to make each Annual Session a stepping stone to future ones of higher interest.

SEC. 4.—The Council shall, in connection with the House of Delegates, consider and advise as to the material interests of the profession and of the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation and to diffuse popular information in relation thereto.

SEC. 5.—The Council shall make careful inquiry into the condition of the profession of each county in the state and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality and shall continue these efforts until every physician in every county of the state who can be made reputable has been brought under medical society influence.

SEC. 6.—The Council shall encourage postgraduate and research work, as well as home study, and shall endeavor to have the results utilized and intelligently discussed in the county societies.

SEC. 7.—The Council shall, upon application, provide and issue charters to county societies organized to conform to the spirit of this Constitution and By-Laws.

SEC. 8.—In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies to be designated by hyphenating the names of two or more counties so as to distinguish them from district and other classes of societies; and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for county societies, until such counties may be organized separately.

SEC. 9.—The Council shall be the Board of Censors of the Association. It shall consider all questions involving the rights and standings of members whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the General or Section Meetings shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members of component societies on which an appeal is taken from the decision of an individual Councilor, and its decision in all such matters shall be final.

SEC. 10.—The Council shall provide for and superintend all publications of the Association, and shall have authority to appoint an editor and such assistants as it deems necessary, and fix the amounts of their salaries. The proceedings of the Council for the year shall be reported to the House of Delegates at the Annual Session and be published in the number of THE JOURNAL which immediately precedes the Annual Session.

SEC. 11.—In the interim between the sessions of this Association the Council shall be the executive body of the Association with full power to fill vacancies or transact any business that emergencies or the welfare of the Association may require.

(SEC. 12.—The Council shall employ an Executive Secretary, who need not be a physician nor a member of the Association.)

SEC. 12.—Deleted. (See Article IX, new Sections 1 and 2.)

(SEC. 13.—The Council shall elect a committee of five members of the Association, three of whom in consequence of their necessarily intimate relationship with the Association shall be President, President-elect, and the Chairman of the Council, which shall be known as the Executive Committee.)

SEC. 13.—The Council shall elect two members of the Association, who, with the President, the President-elect, and the Chairman of the Council, shall constitute and be known as the Executive Committee.

CHAPTER VIII.—STANDING COMMITTEES

(SECTION 1.—The standing committees shall be as follows:

The Executive Committee.
A Committee on Arrangements.
A Committee on Scientific Work.
A Committee on Public Policy and Legislation.
A Committee on Publicity.
A Committee on Industrial and Civic Relationship.
A Committee on Medical Education and Hospitals.
A Committee on Budget.

Such committees, except the Executive Committee, which is elected by the Council, and the Committee on Budget, the membership of which is hereinafter provided for, shall be appointed by the President of the Association, and the President and Executive Secretary of the Association shall be *ex officio* members of all standing committees. The President also may appoint such other committees as may be necessary. No member of the Indiana State Medical Association shall serve as a member of two major committees in any one year.)

SECTION 1.—The standing committees shall be as follows:

The Executive Committee.
A Committee on Arrangements.
A Committee on Scientific Work.
A Committee on Public Policy and Legislation.
A Committee on Publicity.
A Committee on Industrial and Civic Relationship.
A Committee on Medical Education and Hospitals.
A Committee on Budget.
A Committee on Public Relations.

Such committees, except the Executive Committee, which is elected by the Council, and the Committee on Budget, the membership of which is hereinafter provided for, shall be appointed by the President of the Association, and the President and Executive Secretary of the Association shall be *ex officio* members of all standing committees. The President also may appoint such other committees as may be necessary. No member of the Indiana State Medical Association shall serve as a member of two major committees in any one year.

SEC. 2.—*The Executive Committee*, consisting of five members as heretofore provided for, shall meet regularly once a month with the Executive Secretary to plan and execute such work as may be necessary for the welfare of the Association and the conduct of the Executive Secretary's office. It shall constitute the Medical Defense Committee of the Association and shall have full authority governing all matters pertaining to the medical defense features of this Association, and shall be governed by the rules and regulations concerning such features as provided for in the By-Laws of this Constitution. It shall represent the Council during intervals between meetings of that body and shall report its doings to the Council.

SEC. 3.—*The Committee on Arrangements*, with the advice and assistance of the Executive Secretary, shall provide suitable accommodations for the meetings of the Association, including the House of Delegates, Council, and of their respective committees, the scientific and commercial exhibits, and in conjunction with the Executive Secretary shall have general charge of all the arrangements. Its Chairman shall report an outline of the arrangements to the Executive Secretary of the Association for publication in THE JOURNAL and in the official program, and shall make additional announcements during the session as occasion may require. The arrangements for and the character of any and all commercial exhibits must meet with the approval of the Executive Committee of the Association.

(SEC. 4.—*The Committee on Scientific Work* shall consist of three members, one to serve one year, one to serve two years, and one to serve three years, thereafter one to be appointed each year for a period of three years; the senior member to be Chairman.

The President of the State Medical Association, the officers of the sections, and the Executive Secretary are to be *ex officio* members.

Section officers shall be responsible to the Committee on Scientific Work for the section speakers and papers.

Liaison shall be maintained between the Committee on Scientific Work and the scientific exhibitors. Thirty days previous to each Annual Session it shall prepare and issue a program announcing the order in which papers, discussions, and other business shall be presented. Such program and all announcements concerning the Annual Session shall be published in the number of THE JOURNAL of the Association that is issued just prior to the Annual Session.)

SEC. 4.—*The Committee on Scientific Work* shall consist of three members, one to serve one year, one to serve two years, and one to serve three years, thereafter one to be appointed each year for a period of three years; the senior member to be Chairman.

The President, the officers of the sections, and the Executive Secretary are to be *ex officio* members.

Liaison shall be maintained between the Committee on Scientific Work and the scientific exhibitors. Thirty days previous to each Annual Session it shall prepare and issue a program announcing the order in which papers, discussions, and other business shall be presented. Such program and all announcements concerning the Annual Session shall be published in the number of THE JOURNAL of the Association that is issued just prior to the Annual Session.

(See Chapter III, Section 2.)

SEC. 5.—*The Committee on Public Policy and Legislation* shall consist of three members and the President and Executive Secretary of the Association. Under the direction of the House of Delegates it shall represent the Association in securing and enforcing legislation in the interest of public health, medical education, scientific medicine and the economic welfare of the medical profession. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and to protect the medical profession, and shall strive to organize professional influence so as to promote the general good of the community in local, state and national affairs and elections.

SEC. 6.—*The Committee on Publicity* shall consist of five members, two of which shall be the President and the Executive Secretary of the Association. It shall be responsible for the dissemination of information concerning individual and community health to the lay public through articles prepared for publication in lay publications, or for addresses or talks delivered before lay audiences under the authority of the Association, and shall in every way seek to give the lay public a better knowledge and understanding of the aims and objects of scientific medicine.

SEC. 7.—*The Committee on Industrial and Civic Relationship* shall consist of three members appointed by the President, each to serve for three years, one member to be appointed each year. The duties of the committee shall be: To study, gather facts and become intimately acquainted with all and every movement wherever and by whomsoever agitated, proposed, enacted or attempted to be enacted, that has as its secret or avowed object the providing of social, commercial or industrial medical insurance for the public, civic or commercial employers, or for the providing of medical or surgical care to a group or groups of individuals, singly or collectively, or which in any manner affects the economic and financial status of the members of this Association either individually or collectively; to represent this Association in efforts to secure greater cooperation and a mutual understanding between medical men and employers of labor or their insurance carriers concerning the rendering of professional services in industrial cases and the amount and character of compensation therefor; to devise and advise, whenever necessary, intelligent action on the part of this Association upon these questions; and to report annually, and in writing, its findings, recommendations and information to the House of Delegates. Should occasion arise in the interval between the stated meetings of the House of Delegates when prompt action becomes imperative, the committee is to present its findings to the Chairman of the Council and President, who are to proceed in such emergencies as empowered by this Constitution and By-Laws.

SEC. 8.—*The Committee on Medical Education and Hospitals* shall consist of three members appointed by the President, each to serve for three years, one member to be appointed each year. The duties of this committee shall be to cooperate with the authorities of the Indiana University School of Medicine in efforts to improve the educational standards of the state as they pertain to the practice of medicine; to act in conjunction with the members of the Council in providing postgraduate clinics or teaching for the various Councilor medical districts of the state; to select one of its own members as a delegate to the yearly Conference on Medical Education and Hospitals of the American Medical Association; and to cooperate with the corresponding Council of the American Medical Association.

SEC. 9.—*The Committee on Budget* shall consist of the officers, the retiring President and the chairman of the Council. The duty of this committee shall be to prepare a budget for the ensuing year, and all expenditures of the Association, except those otherwise provided for by the Constitution and By-Laws, shall be governed by the budget. No expense not provided for in the budget shall be incurred by any officer or committee. A committee or an officer may submit a request for funds to meet unusual expenses, which request may be granted by two-thirds vote of the Budget Committee.

SEC. 10.—*The Committee on Public Relations* shall have as its duty to act as liaison between the Indiana State Medical Association, the Indiana University School of Medicine, the Indiana Division of Public Health, and the public; to hear and investigate complaints; to gather facts, and so far as it may be in their province, to correct existing faults and incorrect information; to further cooperation; and to obtain proper and legitimate publicity through the Publicity Committee of all matters of public interest concerning the above.

CHAPTER IX.—REFERENCE COMMITTEES

SECTION 1.—Immediately after the organization of the House of Delegates at each Annual Session, the President shall appoint from the members of the House, reference committee to serve during the session at which they are appointed. Each committee shall consist of five members, the chairman to be specified by the President. To these committees shall be referred all reports, resolutions, measures and propositions presented to the House of Delegates, except such matters as properly come before the Council, and the recommendations of these committees shall be submitted to the next meeting of the House of Delegates for acceptance in the original or modified form or for rejection.

SEC. 2.—The following reference committees are hereby constituted:

(1) A Committee on Sections and Section Work to which shall be referred all matters relating to the sections or section work. The members of

the Committee on Scientific Work shall be members *ex officio* of this committee.

(2) A Committee on Rules and Order of Business to which shall be referred all matters regarding rules governing the action, methods of procedure, and order of business of the House of Delegates.

(3) A Committee on Medical Education and Hospitals to which shall be referred all matters relating to medical education and medical colleges and hospitals. The members of the standing committee on Medical Education and Hospitals shall be *ex officio* members of this committee.

(4) A Committee on Public Policy and Legislation to which shall be referred all matters relating to state and national legislation, and memorials to the legislature, to the United States Congress, to the Governor of the state, or to the President of the United States. The members of the standing committee on Public Policy and Legislation shall be *ex officio* members of this committee.

(5) A Committee on Publicity to which shall be referred all matters relating to publicity. The members of the standing committee on Publicity shall be *ex officio* members of this committee.

(6) A Committee on Hygiene and Public Health to which shall be referred all matters relating to hygiene and public health.

(7) A Committee on Amendments to the Constitution and By-Laws to which shall be referred all proposed amendments to the Constitution and By-Laws.

(8) A Committee on Reports of Officers to which shall be referred the address of the President and the reports of the Executive Secretary, Treasurer, and the Council.

(9) A Committee on Credentials to which shall be referred all questions regarding registration and the credentials of delegates.

(10) A Committee on Miscellaneous Business to which shall be referred all business not otherwise disposed of.

CHAPTER X.—COUNTY SOCIETIES

(SECTION 1.—All county societies now in affiliation with this Association or those which may hereafter be organized in this state, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, on application, receive a charter from and become a component part of this Association.)

SECTION 1.—All county societies now in affiliation with this Association or those which may hereafter be organized in this state, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, on application, receive a charter from and become a component part of this Association. The acceptance or retention of this charter shall be regarded as a pledge on the part of the said component society to conduct itself in harmony with the letter and/or spirit of this Constitution and By-Laws and other rules and resolutions of this Association.

(SEC. 2.—Charters shall be issued only upon approval of the Council and shall be signed by the President and Executive Secretary of this Association. The Council shall have authority to revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.)

SEC. 2.—Charters shall be issued only upon approval of the Council and shall be signed by the President and Executive Secretary of this Association. The Council shall have authority to revoke the charter of any component society whose actions are in conflict with the letter and/or spirit of this Constitution and By-Laws.

SEC. 3.—Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures and concessions shall be made, with the aid of the Councilor for the district if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

SEC. 4.—Each county society shall be judge of the qualifications of its own members, but, as such societies are the only portals to this Association and to the American Medical Association, every reputable and legally registered physician who does not practice or claim to practice, nor lend his support to, any exclusive system of medicine shall be entitled to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every physician in the county to become a member.

SEC. 5.—Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, and its decision shall be final.

SEC. 6.—In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

SEC. 7.—When a member in good standing in a component society moves to another county in this state, his name, on request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves.

SEC. 8.—A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

SEC. 9.—Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the member-

ship until it embraces every qualified and honorable physician in the county.

(SEC. 10.—At some regular meeting in advance of the Annual Session of this Association, each county society shall elect a delegate or delegates and alternates to represent it in the House of Delegates of this Association, and the secretary of the society shall send a list of such delegates and alternates to the Executive Secretary of this Association at least thirty days before the Annual Session. No one shall be entitled to a seat in the House of Delegates unless his credentials as a delegate or alternate, properly signed by the secretary and president of the county society, be presented to the Committee on Credentials at the time of the Annual Session.)

SEC. 10.—At the annual business meeting for election of other officers, in advance of the Annual Session of this Association, each county society shall elect delegates and alternates to represent it in the House of Delegates of this Association, and the secretary of the society shall send a list of such delegates and alternates to the Executive Secretary of this Association annually on or before June first.

(See Chapter IV, Section 2.)

SEC. 11—The secretary of each component society shall keep a roster of all its members and of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this state, and such other information as may be deemed necessary. In keeping such roster the secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

SEC. 12.—The fiscal year of the Association shall be from January 1 to December 31, and all assessments shall be for the fiscal year and *payable in advance*. The secretary of each component society shall forward the assessment for his society, together with the roster of officers and members and list of non-affiliated physicians of the county, to the Executive Secretary of this Association, on or before January 1 of each year, and he shall promptly report thereafter the names of any new members elected to membership in his society, and promptly forward to the Executive Secretary of this Association the assessment for such new members. The assessment shall be the same for all members and entitle the members to all benefits, including the publications of this Association, from the time of paying the assessment to the close of the fiscal year only.

SEC. 13.—Any county society which fails to pay its assessment or make the report required by February 1 of each year shall be held suspended, and none of its members or delegates shall be permitted to receive any of the publications of the Association or participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

SEC. 14.—Each county society shall be held responsible for the faithfulness in the performance of duty on the part of its secretary in making reports and remitting dues or assessments to the Association.

SEC. 15.—Each component society shall have its own Constitution and By-Laws, not in conflict with the Constitution and By-Laws either of this Association or of the American Medical Association, a copy of which shall be filed with the Executive Secretary of this Association; and furthermore, the Executive Secretary shall be notified at once of any changes or amendments that may be made from time to time.

CHAPTER XI.—MISCELLANEOUS

SECTION 1.—The deliberations of this Association shall be governed by parliamentary usage as contained in Roberts' Rules of Order, when not in conflict with this Constitution and By-Laws.

SEC. 2.—The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

CHAPTER XII.—MEDICAL DEFENSE

SECTION 1.—Seventy-five cents out of the annual dues of each member of the Association shall be set aside as a special fund for medical defense.

SEC. 2.—The administration of medical defense of this Association shall be intrusted to the Executive Committee, which shall constitute the Committee on Defense of the Association.

SEC. 3.—This committee shall have full authority governing all matters pertaining to the Medical Defense features of this Association; with power to employ counsel, summon and employ expert witnesses and incur such other expenses as in the judgment of the committee may be necessary in the defense of members against whom suits may be brought; provided, always, that the total expenditure in any single suit shall not exceed 25 per cent of the fund available at the time suit is filed; and provided further that this Association shall not be liable for attorney's fees in such suits unless this committee shall have first agreed in each case with the physician sued and the attorneys representing him in regard to the terms of such employment, including the fees to be paid.

SEC. 4.—The Treasurer of the Indiana State Medical Association shall be custodian of the Defense Fund, separately kept, and shall give such additional bond as may be demanded by the Medical Defense Committee. He shall pay out money from this fund only on the signed order of the Chairman of the Executive Committee and countersigned by the President and the Chairman of the Council.

SEC. 5.—The Medical Defense Committee shall make an annual report to the House of Delegates

of the cases in which it has been of service to members and furnish an account of the money received and expended, such report to be published in THE JOURNAL of the Indiana State Medical Association at the time and in the manner that reports of other committees of the Association are published. The financial report of the committee shall be submitted to and approved by the Council.

SEC. 6.—This Association shall not be liable for any damage awarded, but shall be liable only for such expenses for the legal defense of its members as may be incurred in accordance with the terms of these By-Laws.

(SEC. 7.—The Association shall not undertake the defense of a member in a suit that may be brought to secure indemnity for services rendered prior to January 1, 1912, nor in any case in which the member who applies for medical defense by the Association has failed to pay his annual dues for the year in which services were rendered which are the basis of the suit, and that medical defense by the Association shall not be available to those who are delinquent, or to those who have not paid the annual dues of the Association prior to the rendering of services for which indemnity is asked. (Dues are payable on January 1, and become delinquent on February 1 of each year.) The membership card of this Association, duly signed and dated by the Executive Secretary, shall be considered the only *bona fide* evidence of payment of dues or membership in this Association.

The Indiana State Medical Association shall in no case provide medical defense against any action for malpractice against any physician unless such physician was a member of this Association in good standing at the time the services which are the basis of this suit were rendered.)

SEC. 7.—The Association shall not undertake the defense of a member in a suit that may be brought to secure indemnity for services rendered prior to January 1, 1912, nor in any case in which the member who applies for medical defense by the Association has failed to pay his annual dues for the year in which services were rendered which are the basis of the suit; and medical defense by the Association shall not be available in any suit based on services rendered during any period of delinquency in the payment of dues. (Dues are payable on January 1, and become delinquent on February 1 of each year.) The membership card of this Association, duly signed and dated by the Executive Secretary, shall be considered the only *bona fide* evidence of payment of dues or membership in this Association.

The Indiana State Medical Association shall in no case provide medical defense against any action for alleged malpractice against any physician unless such physician was a member of this Association in good standing at the time the services which are the basis of the suit were rendered.

SEC. 8.—A member desiring to avail himself of the services of the Committee on Medical Defense in connection with litigation brought or threatened must send to the Executive Secretary of the Association for an application blank. After completing the data concerning the case he shall submit to a local committee of his county medical society—to be composed of the President, Secretary and one other member in good standing who may be nominated by the defendant—a full statement of the question at issue, including the diagnosis and treatment of the case and the names of physicians, nurses and other persons having knowledge of the same, who may be summoned as witnesses.

SEC. 9.—The committee of the county medical society shall immediately, after an investigation of all the circumstances and facts, transmit its report, with recommendations, to the Committee on Medical Defense of this Association.

SEC. 10.—Accompanying such report from the county society, if favoring medical defense by the Association, there also must be furnished the written authority of the defendant granting to the Medical Defense Committee of this Association full power to act in his behalf, and an agreement that his case shall not be compromised or settled without the consent of a majority of the Committee on Medical Defense.

SEC. 11.—In the event that the county committee shall fail to recommend the case as one worthy of the recognition of this Association, a direct appeal may be made to the Committee on Medical Defense of this Association, whose decision shall be final.

SEC. 12.—Suits brought against the estate of a deceased member shall be defended as if that member were alive; provided that such member was in good standing in the Association at the time of his death and that services for which indemnity is asked were rendered while the deceased was a member in good standing.

SEC. 13.—Each member of the Committee on Medical Defense of this Association shall be entitled to an honorarium of $10 per diem for services actually rendered while at home, and $30 per diem with traveling expenses, if required to go out of town in the investigation of any case or in attendance at court, and these same fees shall be allowed to expert witnesses under similar circumstances.

SEC. 14.—Medical defense shall not be available to members living outside of the State of Indiana at the time services were rendered for which indemnity is claimed.

SEC. 15.—The Committee on Medical Defense shall have power to adopt such other rules, not in conflict with the foregoing, as in their judgment may seem necessary.

(SEC. 16.—Medical defense as provided for by this Association shall be available to members under the terms stated in these By-Laws only to defense of civil actions for malpractice.)

SEC. 16.—Medical defense as provided for by this Association shall be available to members under the

terms stated in these By-Laws only to defense of civil actions for alleged malpractice, and shall not be available if such alleged malpractice occurred when the member was under the influence of any intoxicant or narcotic while rendering the service in question.

CHAPTER XIII.—DIVISION OF FEES

This Association does not countenance or tolerate fee-splitting, division of fees, or commission paying directly or indirectly, and any member found guilty shall be expelled from membership.

CHAPTER XIV.—AMENDMENTS

SECTION 1.—These By-Laws may be amended at any Annual Session by a majority vote of all the delegates present at that session, after the amendment has lain on the table for one day.

SEC. 2.—Upon the adoption of this Constitution and By-Laws, all previous Constitutions and By-Laws are hereby repealed.

BOOK REVIEWS

BOOKS RECEIVED

LIVING ALONG WITH HEART DISEASE. By Louis Levin, M. D., Cardiologist to the St. Francis Hospital and New Jersey State Prison Hospital, Trenton, N. J.; formerly Consulting Cardiologist to New Jersey State Hospital at Trenton. Foreword by Thomas M. McMillan, M. D. 126 pages; cloth bound. Price $1.50. The Macmillan Company, New York, 1935.

* * *

PUERPERAL GYNECOLOGY. By J. L. Bubis, M. D., F. A. C. S., Consultant in Obstetrics, Gynecologist, Mt. Sinai Hospital, Cleveland, Ohio. Foreword by P. Brooke Bland, M. D. Cloth. 224 pages, with 81 illustrations. Price $3.50. William Wood and Company, Baltimore, 1935.

* * *

1000 QUESTIONS AND ANSWERS ON T.B. Edited by Fred H. Heise, M. D., Medical Director, Trudeau Sanatorium, and Question Box Editor, Journal of the Outdoor Life. 232 pages. Cloth. Price seventy-five cents. Copyright, 1935, by the National Tuberculosis Association. Published by Journal of the Outdoor Life, 50 West 50th Street, New York City.

* * *

NEW AND NONOFFICIAL REMEDIES, 1935. Containing Descriptions of the Articles which Stand Accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1935. 510 pages and a 41 page bibliographical index. Cloth. Price $1.50. American Medical Association, Chicago, 1935.

* * *

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1934 WITH THE COMMENTS THAT HAVE APPEARED IN THE JOURNAL. 135 pages. Cloth. Price $1.00. Press of the American Medical Association, 535 North Dearborn Street, Chicago, 1934.

* * *

DIET CONTROL. A system of 1,100 diets for the prescription of diabetic, anti-obesity and measured diets in general. By George E. Anderson, M. D., attending physician to the Brooklyn Hospital and the Lutheran Hospital; and Paul Chadbourne Eschweiler, M. D., assisting attending physician to the Brooklyn Hospital and the Methodist-Episcopal Hospital. Loose-leaf, fabrikoid binder. Gallo and Ackerman, Inc., Publishers, 142 Liberty Street, New York City.

* * *

THE AMERICAN ILLUSTRATED MEDICAL DICTIONARY. A complete dictionary of the terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry, Nursing, Veterinary Science, Biology, Medical Biography, etc. By W. A. Newman Dorland, A. M., M. D., F. A. C. S., Lieut.-Colonel, M. R. C., U. S. Army; Member of the Committee on Nomenclature and Classification of Diseases of the American Medical Association. With the collaboration of E. C. L. Miller, M. D., Medical College of Virginia. Seventeenth Edition, Revised and Enlarged. Octavo of 1,573 pages with 945 illustrations, including 283 portraits. Philadelphia and London. W. B. Saunders Company, 1935. Flexible and stiff binding. Plain $7.00 net; Thumb Index $7.50 net.

* * *

DISEASES OF THE THYROID GLAND. By Arthur E. Hertzler, M. D., Chief surgeon, Halstead Hospital; professor of surgery, University of Kansas. Chapter on Hospital Management of Goiter Patients by Victor E. Chesky, M. D., chief resident surgeon, Halstead Hospital. Third edition, entirely rewritten. 348 pages. Cloth. Price $7.50. The C. V. Mosby Company, St. Louis, 1935.

BOOKS REVIEWED

NEW AND NONOFFICIAL REMEDIES, 1935. Containing Descriptions of the Articles Which Stand Accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1935. Cloth. Price $1.50. Pp. 510. Chicago, American Medical Association, 1935.

In this book the Council on Pharmacy and Chemistry lists and describes the medicinal preparations that it has found acceptable for general use by the medical profession. A glance at the list of the Council members and the long list of consultants appearing in the first part of the book gives ample warrant for the authority of the Council's selections.

Not only does the Council "accept" new preparations but from time to time it omits those which have been accepted but which have not with the lapse of time upheld their original promise of therapeutic merit. The list of omissions for 1934 shows that the Council has been mainly concerned in this respect with B. acidophilus preparations and with antiseptics. Several preparations of each class have been omitted. The list of admissions does not reveal the presence of any preparation that promises to be epoch making in the sense that insulin was, for instance. However, the following newly accepted preparations are noteworthy: Carharsone, an arsenical used chiefly in the treatment of amebiasis (the Council published a special report on this drug, supplementing the preliminary report of 1932); Hippuran and Diodrast, two different types of urographic contrast mediums: Carotene, the precursor of vitamin A; Dilaudid, a substitute for morphine; Neo-Synephrin Hydrochloride, which has a number of advantages as a vasoconstrictor over synephrin tartrate; and Diothane, which represents a type of local anesthetic entirely different chemically from any heretofore accepted for N. N. R.

The description of products containing vitamins A and/or D have been revised to give the potencies in terms of the recently adopted pharmacopeial units, thus bringing some measure of uniformity into this heretofore chaotic field. No doubt the book will be revised next year to conform with the new Pharmacopeia in its entirety.

A valuable feature of the book is the grouping of preparations in classes. Each of these is introduced by a general discussion of the group. Thus the silver preparations, the iodine preparations, the arsenic preparations, the animal organ preparations and the biologic products are each preceded by a general discussion of the particular group. These general articles compare the value of the products included in the group with similar pharmacopeial and other established drugs

which it is proposed that these proprietary preparations shall supplement or supplant.

Physicians who wish to know why a given proprietary is not described in New and Nonofficial Remedies will find the "Bibliographical Index to Proprietary and Unofficial Articles not Included in N. N. R." of much value. In this section (in the back of the book) are given references to published articles dealing with preparations that have not been accepted. These include references to the Reports of the Council, to Reports of the A. M. A. Chemical Laboratory and to articles that have appeared in THE JOURNAL.

* * *

ANNUAL REPRINTS OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1934, WITH THE COMMENTS THAT HAVE APPEARED IN THE JOURNAL. Cloth. Price $1. Pp. 135. Chicago, American Medical Association, 1934.

Each succeeding volume of reports of the Council reveals more of the long and successful fight in the interest of rational therapeutics. The Council is no longer chiefly concerned with noisome proprietaries and yet this latest volume contains reports on such articles as "Vita-Cell," a secret preparation marketed with exaggerated claims, and "Raylos," a shotgun preparation marketed in a way to promote its ill advised use by the public. Most of the "unacceptable" reports in this volume are concerned with products that may have some merit but are not offered to the public in a way which experience has taught the Council is necessary before a therapeutic agent is acceptable. Such products are Iodine Dusting Powder (Sulzberger), rejected for lack of clinical evidence of its advantage over one of its constituents; Pernoston, rejected because of lack of clinical evidence to justify routine intravenous injection of barbital compounds; Di-Hydranol, a claimed bacteric'dal agent proposed for use as an "intestinal antiseptic," a claim not supported by sufficient clinical evidence; and Squibb Adex Tablets, a product containing a concentrate of vitamins A and D, for which the firm could not agree to adopt a more informative name.

To those who have followed the Council's investigation of B. acidophilus therapy, the report "Acidophilus Bacillus Liquid-Mulford and Mulford Acidophilus Bacillus Block Omitted from N. N. R." will be of interest. The Council has apparently not yet reached an ultimate conclusion concerning acidophilus therapy, but it has for years held that no product could be expected to be of value unless it could show at least one hundred million viable B. acidophilus organisms at the "date of expiration." Competent bacteriologic examination showed that the two preparations here reported were inferior to this standard. Further grounds for omission were the failure of the manufacturer to comply with certain stipulations in regard to labels and advertising. Another noteworthy omission is that of Alpha-Naphco and its dosage forms, omitted because the Council on reconsideration found that it is a weak antiseptic.

The Council also issues preliminary reports, which define the status of new preparations for which the evidence is not yet sufficient to justify their presentation to the medical profession generally. Preliminary reports do not imply rejection but rather postponement of consideration until more evidence is reported by competent investigators. These reports are the outposts of therapeutic progress and as such are valuable sources of information to physicians. In this volume there are preliminary reports on Adrenal Cortex Extract, concerned mostly with scientific terminology, Cysteine Hydrochloride, Dihydroxy-Anthranol (Anthralin), Gastric Mucin, Hemoprotein (Brooks), Phenylmercuric Nitrate and Phenylmercuric Chloride.

Illustrative of the Council's efforts to keep those concerned informed of the basis for its actions are the "Recent Revisions or Elaborations of the Council's Rules of Interest to Manufacturers and the Medical Profession," which have appeared in the last two volumes. These inform the profession of the various problems which arise and the care given to their consideration. To be commended also is the "Report on Sterility of Ampule Preparations."

(Continued on page xx)

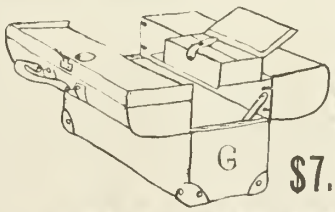
PROFESSIONAL PROTECTION

SINCE 1899 SPECIALIZED SERVICE

A DOCTOR SAYS—

"Just received your notice of dismissal of the case against me. Thank you very much.....I have retired from practice and my son has your protection for which I am thankful"

THE MEDICAL PROTECTIVE COMPANY
OF FORT WAYNE, INDIANA
WHEATON, ILLINOIS



Physicians' BAGS
$7.98 to $20
GAUSEPOHL TRUNKS
51 MONUMENT CIRCLE Indianapolis

Important to Your Babies!

ACCEPTED AMERICAN MEDICAL ASSN. Committee on Foods



Larsen "Freshlike" Strained Vegetables are first quality garden fresh vegetables cooked, strained and sealed under vacuum to protect vitamins and mineral salts. For further protection we seal in special enamel lined cans.

All Varieties 10c Per Can

LARSEN'S "Freshlike" Strained Vegetables

THE LARSEN COMPANY, Green Bay, Wis.

Keléket

Announces

THE OPENING OF A NEW AND LARGER BRANCH OFFICE AT

1140 Hume Mansur Building
INDIANAPOLIS

(Telephone, LIncoln 2220)

INCREASING demands upon our services have made it necessary to enlarge our staff and secure more extensive quarters.

You are urged to visit our new Indiana home where you always will find interesting x-ray developments on display. Bring your x-ray problems to us—you will find a sincere spirit of conscientious helpfulness.

WHEN VISITING INDIANAPOLIS, USE OUR OFFICES AND SECRETARIAL SERVICES AS THOUGH THEY WERE YOUR OWN

SALES SERVICE SUPPLIES

The Kelley-Koett Co.
Incorporated
Covington, Kentucky

BOOK REVIEWS—Continued

(Continued from page xix)

PUERPERAL GYNECOLOGY. By J. L. Bubis, M. D., F. A. C. S., Consultant in Obstetrics, Gynecologist, Mt. Sinai Hospital, Cleveland, Ohio. Cloth. Price $3.50. William Wood & Company, Baltimore, Maryland, 1935.

There are few medical books that contain as much concentrated practical information as this one of 199 pages. It is not a text book of obstetrics and gynecology, but a book for the physician actively practicing obstetrics. It assumes that he understands and is able to perform gynecological repair operations and is not just a male midwife. If the author convinces the reader that all birth injuries should be carefully repaired at the time they are made he will be doing a good job. Dr. Bubis goes further and demonstrates that old lacerations as well as new can be repaired immediately after delivery in a large percentage of cases with satisfactory results and a great saving in hospitalization to the patient if a delayed operation is to be done. The author gives the indications and contraindications. In 1,326 full term pregnancies where old tears were repaired, 82.7 per cent were operated upon immediately after delivery, and 15.6 per cent were done between the third and seventh day. The importance of prevention of subinvolution and predisposition to cancer is stressed.

Dr. Bubis has written many papers on this subject over many years, and this book is a more complete presentation of the subject including chapters on delivery care in general. Although there are many references to the literature, the book chiefly represents Dr. Bubis' methods and ideas.

The first chapter is on the anatomy and physiology of the genitalia. Following are chapters on prenatal care and the delivery; this latter chapter, including analgesia and anesthesia is well worth the price of the book. The next chapters deal with the pathological changes and the repair of birth tract injuries. The illustrations are numerous and clearly show what the text describes.

There is a chapter on oral complications in which Dr. Bubis recommends surgical care during the lying-in period rather than watchful and painful waiting. Descriptions of special therapy and procedures, urinary complications and postnatal care are concise but thorough and practical.

This is an excellent book on a neglected subject.

COMMERCIAL ANNOUNCEMENTS

ASSISTANCE TO MEDICAL WRITERS. Research, Abstracts, Translations (all European languages). Papers prepared. All work done personally. Ten years' medical literary experience with institutions and leading journals. Florence Annan Carpenter, 413 St. James Place, Chicago, Illinois.

PHYSICIAN WANTED. Eye, ear, nose, and throat specialist wanted for work in clinic; must be able to do refractions, and will be expected to do some other work in the clinic. Will be started on a salary basis and later put on percentage basis. Address Box B, c/o The Journal, 1021 Hume Mansur Building, Indianapolis.

GOOD, UNOPPOSED PRACTICE—ten miles to nearest competition; cash business from start. Good town and country. Stock of drugs and some equipment for sale for $600. Address Box D, c/o THE JOURNAL, 1021 Hume Mansur Building, Indianapolis.

UNUSUAL OPPORTUNITY—Location occupied by physicians for past fifty years available immediately. Address Mrs. George D. Miller, Logansport, Ind.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

OFFICE OF PUBLICATION: 1021 Hume Mansur Bldg., INDIANAPOLIS, INDIANA

VOLUME 28 OCTOBER, 1935 No. 10

ORIGINAL ARTICLES

CHARCOT'S DISEASE OF THE FOOT*

E. M. VAN BUSKIRK, M. D.
FORT WAYNE

In 1868 Charcot noted an arthropathy associated with lesions of the brain and spinal cord and described it as a clinical entity which now bears his name.[1] However, in 1831 Mitchell referred to arthropathies associated with Pott's disease with paraplegia comprising the general characteristics of the condition described by Charcot.[2] Since Charcot's original description, many articles have been written, and many cases reported, with numerous classifications. In general, the enlarged, relatively painless and hypermobile joints are grouped under any of the following: Charcot's or tabetic arthropathy, syringomyelic arthropathy, neuropathic arthritis, arthropathy of peripheral nerve lesions, injuries to the cord by fracture of the spine and tumors of the cord and meninges.[3,4]

Charcot, quoted by Sutherland,[5] divided his arthropathies into two types, that is, first, the subacute and acute arthropathies characterized by tumefaction, redness, occasionally pain associated with traumatic or inflammatory lesion of the cord, and, second, those associated with locomotor ataxia.

ETIOLOGY

Charcot believed the joint changes were due to destruction of trophic fibers in the cord produced by tabes. Volkmann and others,[1,4] believed the mechanical traumatic injury acting on a joint so predisposed by cord degeneration to be a very important factor.

Carmichael[2] points out that while it was commonly accepted that the sensory impairment in Charcot's disease was dependent upon a central lesion, nevertheless subsequent writers have been "impressed with the relative frequency of arthropathies, apparently clinically identical with those described by Charcot in which peripheral nerve injury was the only neurogenic factor demonstrated. The fact that these arthropathies when occurring in the tabetic occur early as pre-ataxic phenomena and the fact of the recognized hypermobility of tabetic joints further supports the postulation that joint trauma plays an important role in the bony proliferation process."

Wile[4] states that 24% of joint disease was evident after some trauma. He further states that in every case the joints involved are associated with destruction of their afferent (proprioceptive) nerves, rendering them unable to compensate for injury. With each injury, there is further altered structure, finally presenting the pathological changes seen in Charcot joints. In the cases with destruction of dorsal columns, such as seen in tabes, the condition deprives the joint of its ability to compensate for injury. In addition it may result from spina bifida, direct nerve injury, syringomyelia, and by severing of the posterior nerve roots. By way of summary it may be said that the primary factors seem to be the inability of the joint to compensate for injury, dependent on spinal cord disease, while the contributing factors are the various forms of insult to which a thus predisposing joint is exposed.[4]

* Presented before the Allen County Medical Society, April 7, 1934.

[1] Steindler, A.: The Tabetic Arthropathies. *Jour. Am. Med. Asso.*, January 24, 1931, Vol. 96, pp. 250-255.

[2] Carmichael, F. A.: Multiple Neurotrophic Joint Disease of the Charcot Type with Case Report. *J. Kansas M. Soc.* 32:186-193, June, 1931.

[3] Ghormley, R. K.: Charcot Joints in a Case of Syringomyelia. *Surg. Gyn. Obst.*, Vol. xliii, November, 1926, No. 5, pp. 695-697.

[4] Wile, Udo J. and Milton, G. Butler: A Critical Survey of Charcot's Arthropathies. *Jour. Am. Med. Asso.*, April 5, 1930, Vol. 94, pp. 1053-1055.

[5] Sutherland, C. G.: Charcot's Joints. *Journal of Radiology*, May, 1925.

INCIDENCE

This disease occurs in late adult life, and rarely before the age of forty years. Key,[6] in his series on tabetic arthropathies reports onset from 30-68 years of age, and the maximum number of cases occurring in the fifth decade, also a high maximum in the sixth decade, with a much lesser number in the fourth and seventh decades.

Neurosyphilis is more common in males than in females. Wile[4] reported 38% in females and 62% in males. From various series, arthropathies occur in about 25% of the cases of syringomyelia and 4-10% in tabes. Tabetic arthropathies are more common in the lower extremities, while syringomyelia involves the upper extremities.

It is a well known fact that in tabetic arthropathies more than one joint is apt to be affected. The distribution, according to the joint involved, as reported by Key[6] was knee 39, foot and ankle 29, hip 15, spine 5, elbow 2, shoulder 1, and wrist 1.

SYMPTOMS

In general, the onset of Charcot's disease occurs with the beginning of the ataxia, and motor incoordination. The onset is characterized by a sudden, spontaneous swelling of the joint, usually without pain and without temperature. This is not necessarily limited to the joint, but may involve the whole member, and is due to fluid in the joint capsule, in the peri-articular tissues and extending up and down the limb. Associated with this there is marked feeling of tension in the extremity. After a few days the so-called "tumefaction" disappears, but considerable swelling of the joint remains, due to the collection of fluid. This fluid, if drawn from the joint, is transparent and lemon-colored.

After a period of weeks, the chronic phase is noted, with the resolution of the fluid leaving behind an extremely mobile joint, due to the stretching of the ligaments and capsule. Often luxations occur which are due to the wearing away of the heads of the bones, frequently in a short period of time. In association with the wearing down of the articular surfaces, there may be the presence of foreign bodies, which are produced in an accidental manner chiefly due to the movements of the affected member. Oftentimes there is wasting of the muscular tissue of the extremity affected by the disorder.[5 6]

As the joint enters the chronic phase, the size of the extremity decreases, but the size of the joint remains the same. The excessive fluid decreases in amount, or it may remain and in some cases break through the capsule and collect in the surrounding tissue spaces. The ligaments of the joint and the capsule stretch and disintegrate, and motion in various planes is evident. Erosion of the cartilagenous bone occurs, with the result of fractures, and the subsequent formation of cartilage and bone thus destroying the normal contour of the joint surfaces. The fractures have a tendency to heal with excessive callous formation, and there may be new bone under the periosteum. With this development the bones approaching the joint will be very wide. Pieces of bone and cartilage may remain free in the joint, thus producing a harsh and bony crepitus on motion, giving the impression of a "bag of bones."

Erosion and absorption of bone seem to be the outstanding factors in some cases, and in others the formation of bone, which can easily be palpated, is the outstanding factor.

In the foot, Key[6] states, the disease tends to begin in the sca-

[6] Key, J. Albert: Clinical Observations on Tabetic Arthropathies. *Am. Jour. of Syph.*, Vol. xvi, October, 1934, No. 4, pp. 429-446.



No. 1. Case 1. Left os calcis shows an avulsion of the apophysis with a proliferation at the tendon as seen in chronic gonorrheal infection.

phoid and adjacent joints. Multiple fractures may involve the tarsal bones, and disintegration is progressive because of the weight bearing. Displacement of the fore-foot either upward or downward on the astralagus and os calcis with deviation and broadening may occur. In some cases the disease may involve the inner side of the arch or the calcaneo-cuboid joint. Occasionally swelling may be limited to the area over the joint, thus making the disease much less severe, because of the resulting apparent recovery.

Occasionally, the development of the Charcot joint is the first sign of tabes, but in general the diagnosis of neuro-syphilis could be made from the physical and laboratory examinations. Various other symptoms are: "lightning pains" or "spot pains," which may be diagnosed as neuritis or rheumatism,[7] and ataxia with difficulty in walking in the dark or difficulty in controlling the muscles of the lower extremities.[1]

Major[8] reported a case of Charcot's foot involving both extremities, with the development of ulcers of the soles of the feet, the painless arthritis with destruction of the bone, and the marked improvement under treatment.

PATHOLOGY

From the pathologic standpoint there are two types noted, that is, the atrophic and the hypertrophic form. In the former degenerative changes, with relaxation or displacement prevailing, and in the latter extra-articular exostoses, osteophytes and ossification of ligaments and muscle predominate. However, very often these forms may just represent different stages of the same arthropathy.

It is generally accepted that the arthropathy is characterized by cartilagenous erosion, compression fractures, chip fractures, flattening and condensation of the joint bodies, intra- and extra - articular exostoses, and ossification of the ligamentous and muscular structures. The effusion is the outstanding factor in the pathological picture having a very destructive effect by contributing to the relaxation of the ligaments.

Steindler[1] states that endochondral ossification under the joint cartilage which ordinarily becomes stationary with formation of a continuous limiting bone lamella, the so-called preliminary calcification zone, is a characteristic point for tabetic arthropathies. The first phase is the tabetic proliferation of the joint cartilage, followed by a forward pushing of the preliminary calcification zone, and finally the penetration of vascular marrow recesses into this zone and then into the calcified cartilage. The degree of this procedure is very variable, and by the development of simultaneous proliferation and absorption, a great irregularity of the joint may result, with altered joint surfaces, and associated unequal distribution of pressure stresses, causing fractures and infraction of joint bodies. It is also noted that pressure on the calcified cartilage causes it to be ground off, which is then followed by the formation of sclerotic bone facets from the subchondral spongious substance. This process thus leads to considerable alterations in the contours and configurations of the joint bodies.

An injury to the affected member vertical to the articular plane may cause an infraction, breaking the brittle preliminary calcification zone into radial fissures.



No. 2. Case 2. Astragalus and navicular almost completely broken up with broken ends showing an osteitis.

[7] Parker, Harry L.: The Pain of Tabes Dorsalis. *M. Clinic North Am.* 12:1551, May, 1929.

[8] Major, R. H.: Charcot's Foot. *Jour. Am. Med. Asso.*, March 17, 1928, Vol. 90, p. 846.

ROENTGENOLOGICAL FINDINGS

The most outstanding feature of Charcot joints as revealed by the roentgen ray is the vast disproportion between the clinical history, the physical examination and the roentgenogram.[5] The changes revealed comprise the following: swelling, excess fluid in joints and tissues, structural changes in the bone, erosion of the bearing surfaces, production of new bone, pathological fractures, loose bodies in the joint, calcification in the periarticular tissues, and subluxations of the articular surfaces.

Diffuse sclerosis of the bone is probably the first roentgenographic sign of the disease. In general the sclerosis is diffuse and fairly uniform near the joint and gradually merges with normal bone. In some cases it may be spotty in character and reveal a mottled appearance. Atrophy of the bone is noted when the affected member is not used, which then is evident in the region of the Charcot joint, but associated with it there is a definite reduction in the density of the bone, trabeculation does not appear, and the bone shows a granular appearance.

As cartilage is removed from the bearing surfaces of the bone, erosion of the joint surface is evident. When this takes place, the underlying bone becomes eburnated and appears unusually dense in the roentgenogram. There may also be erosion around the articular margins, due to the invasion of bone by hyperplastic inflammatory tissues.

Pathological fractures occur very frequently in Charcot joints, involving the articular surface. These fractures may consist of merely the chipping off of the bone, or may be quite massive. These small fragments may remain in the joint cavity as "joint mice," or may become attached to the synovial surface. The massive fractures heal with the formation of excessive callus.

New bone produced in these joints is deposited around the trabeculae and on the walls of the Haversian canals. Osteophytes are also produced, resembling those of hypertrophic arthritis, but are less sharply outlined. New bone may also be formed beneath the articular cartilage. Occasionally, subperiosteal bone may be found around the articular extremities, thus giving a broadening effect to the ends of the bone.

The pathognomonic finding in the roentgenogram consists of the periarticular masses of bone, not always present, irregular in size, shape and density, and varying in size, from minute calcified nodules to large plaques which may extend out into the muscle.

Dislocations and subluxations, often evident in the physical examinations, are very well demonstrated in the roentgenogram.[6]

It is very evident that the roentgenological picture is a very important diagnostic feature in this condition, chiefly in the earlier stages, when the arthropathy may simulate other conditions.[4]

DIFFERENTIAL DIAGNOSIS

Charcot joints must be differentiated from similar arthropathies such as: (1) syringomyelia, (2) arthritis due to injury, (3) hypertrophic arthritis, (4) atrophic arthritis, (5) gonorrheal arthritis, (6) tuberculosis, (7) pyogenic infection, and (8) neoplasms.

1. Arthropathies may occur as a complication of syringomyelia, but usually affect the upper extremities, the shoulder, elbow, wrist, or hip, in contrast to the involvement of lower extremities in Charcot's disease.[8]

2. Arthritis may occur due to impairment or injury to the nerve supply of a limb as a result of central or peripheral disease of the nervous system. It may consist of a single severe injury to a joint with or without fracture, or to a series of minor injuries incident to abnormal use. It may be associated with spina bifida, hemiplegia or paraplegia of central or peripheral neuritis due to injury, gout, diabetes, lead, alcohol or leprosy.[9]

3. The differential diagnosis between hypertrophic arthritis and Charcot joint is not always easy; however, in hypertrophic arthritis in the acute stage, the swelling is limited to the vicinity of the synovial membrane, whereas in Charcot joint the swelling is more generalized.

In the chronic stage of hypertrophic arthritis motion is limited, and accompanied by pain at the limits of motion, while the Charcot joint is hypermobile and not associated with pain.

The roentgenological differentiation is also very difficult, since osteophytes, sclerosis of the bone, narrowing of the joint space, and areas of rarefaction in the cancellous bone are evident in hypertrophic arthritis and Charcot joints. In cases in which the sclerosis of the bone is diffuse and well advanced, a diagnosis of Charcot joint can be made. However, in the more advanced cases of Charcot joints, showing new subperiosteal bone formation, bone debris in the joint cavity, crumbling of the articular margins, periarticular calcification, and erosion, the diagnosis can be made with little difficulty.

4. In atrophic arthritis, there is marked limitation of motion, pain and tenderness, muscle spasm, and atrophy much more marked than in a Charcot joint. In this case the roentgenogram showing sclerosis of the Charcot joint in com-

[9] Castleden, L. I. M.: A Case of Charcot's Disease in Joints Not Commonly Affected. *Lancet* 2:1022-1023, November, 1931.

parison to the rarefaction of bone found in atrophic arthritis makes the diagnosis simpler.

5. Gonorrheal arthritis may simulate a Charcot joint if there is a mild synovitis or mild cellulitis, but pain and tenderness is much more marked than in the Charcot joint.

6. Joint tuberculosis usually presents the characteristic findings of pain, tenderness, muscle spasm, limitation of motion, with swelling sharply limited to the joint cavity and sub-synovial tissues. X-ray examination of a tubercular joint reveals diffuse bone atrophy and periarticular thickening with cloudiness of the joint, and no evidence of repair in the advanced cases.

7. In pyogenic infection there is a presence of fever, leukocytosis, localized swelling, redness, acute pain, and tenderness which rules out Charcot's joint with ease.[6]

8. Neoplasms, accompanied by an unusual amount of tumefaction, may be confusing both from the physical and roentgenological examination; however, bone tumors are usually accompanied by severe pain.[3]

CASE REPORTS

Following are the reports of two cases of Charcot's disease of the foot:

Case 1. Diagnosis: Pathological fracture of os calcis. Syphilitic periostitis.

Clinical history: White male, age 48 years, vagrant. Neisserian infection four years ago. He noticed swelling of the foot about three years previously. Slight ataxic gait when blindfolded. Left ankle and foot show considerable swelling, no tenderness or pain. Walks with care, but just hitchhiked from Denver to Fort Wayne. Wassermann 3+, Kahn 4+, and spinal fluid showed a tabetic curve.

X-ray examination: Left os calcis shows an avulsion of the apophysis, the detached portion being pulled up by the Achilles tendon. At the upper portion of this fragment there is a proliferation at the tendon end such as is seen in chronic gonorrheal infection with an exostosis on the fragment.

Case 2. Diagnosis: Pathological fracture of the talus and the navicular bone.

Clinical history: Laborer, age 37 years. Luetic infection about fifteen years previously. Ataxic gait in addition to slight lump in the right foot, foot not tender or painful. Both Wassermann and Kahn 4+. Tabetic curve positive.

X-ray examination: Astragalus and navicular almost completely ground up with a detritus of bone surrounding pathological structures. Broken ends of bone showed a definite osteitis.

In case 1, disintegration of the os calcis seems quite unusual, while both showed extensive changes with fairly good function.

SUBSTITUTE PARENTAGE*

JAMES K. HALL, M. D.
RICHMOND, VIRGINIA

In suddenness and in majesty of consequences no other occurrence in life is comparable to the activation—the fertilization—of the female germ cell. Throughout the ages, perhaps for eons and eons, two infinitesimally small particles of protoplasm have been converging. Their sudden but quiet fusion marks the beginning of the life of the individual, an individual perhaps unlike every other individual in pre-existence, and different in certain aspects from all others that are to come into existence.

What an unstable, treacherously poorly equilibrated phenomenon is life! How little we know of its origin, of its mechanisms, of its purposes, and of its final destiny! Yet we do know that the life of the individual dates not from what is spoken of as birth, from eruption into the visible world, but from the activation of the ovum of the female by the invasion into it of the male element. From that fusion the one cell that remains only momentarily one, apparently becomes endowed with new qualities. The new single cell becomes possessed of a restlessness and unwillingness and inability to remain as it is. By division, and by many multiplied divisions, by differentiation into many ultimate parts, the microscopic globule of protoplasm eventuates finally into the adult organism, capable, unless thwarted, of projecting itself forever and forever into the unborn future through immortal descendants.

Who would venture to define heredity, or to ignore it? The spring-time season busies man with manifestations of his belief in its undeniable potency. The nursery man, the florist, the gardener, and the farmer select and plant seeds. They are admonished by the disasters and the successes of others and of themselves to be careful of their selections. These tiny granules represent the fused female and male elements. They are in waiting and in readiness to be warmed and wooed by the breath of earth and air into germination, growth, development and fructification, and each seed brings forth fruit after its kind. Does man believe more firmly in any other mystery? Yet how different in potency may be the seeds of the same species! How careful must the selection be made! The grain of corn may bring forth a stalk bearing only a tiny nubbin, or it may fetch forth a great stalk and four large ears of corn. And of the two seeds of wheat—alike in size and in general aspects—one may produce a smooth head of wheat, the other a head bearing a multitude of beards.

All the potentialities of the offspring lie hidden in the genetic seed. To such possibilities none can

* Read by invitation to the Geographical Conference of Child Caring Institutions and Agencies of Richmond at the Orphanage Camp, New Kent County, Virginia, May 14, 1935.

be added. Can any subtraction be made from the aggregation of transmissible qualities? Fortunately or unfortunately, the individual cannot reach back into the hereditary past and make changes. The individual is predetermined. Neither he nor another can increase, decrease, or rearrange those innate qualities or urges. But with the influences of those inherited possibilities in ourselves and in others, we are constantly trying to interfere. Sometimes we attempt to nullify them. That is the purpose of the so-called eugenic sterilization law in Virginia. That law is applied to certain individuals who are thought by some others to be unfit to perpetuate themselves through offspring. The presumption to pre-evaluate human offspring calls for the display of considerable egotism if not genetic omniscience. Many born of lowly or unwholesome parents, in hovels, in wedlock and out of it, have written their names and their deeds in imperishable letters across the inverted celestial bowl. When such a catastrophe in eugenics occurs, the biographer of heredity fetches down all his genealogical charts, brings forth his highly magnified and well-trained reading-glasses, and finds the origin of the inexplicable greatness in some remote ancestor from whom the protoplasmic flow was through subterranean and invisible channels until the spring bubbled forth in crystal clearness in David, the Psalmist; in Job, the carbuncular philosopher; in Homer, the immortal troubadour; in Shakespeare, the undying dramatist; in Washington, our greatest asset; in Lincoln, our American miracle; in Andrew Jackson, our unsquelchable upstart; in Stonewall Jackson, our man of destiny; and in Edison, our magician. Had there been venereal clinics in the medical schools of London, or had England required marriage certificates based upon medical opinion, Elizabeth would never have been born, and there probably would be no mighty British Empire.

For me to deny the power of heredity would be foolish; for you to listen to such futility would constitute an insult to your own intelligence. Not the student alone, but the most casual observer, witnesses daily the display of the activity of this mighty force. In the physical life it is as omnipresent and as powerful as gravity in the domain of matter.

The law of heredity presides over protoplasmic perpetuity. Without such directing and restraining influence, vital activities would evolve into chaotic confusion and destruction. In vegetable structures, and in so-called lower animals, man is concerned chiefly with physical attributes and little with immaterial qualities. Certain qualities, indeed, in color, fragrance, and in taste in plants, can be influenced by careful breeding; and desirable attributes can be added to in many animals by persistently controlled mating. But as a mere muscular animal, man is becoming more and more inconsequential. He is steadily borrowing from the forces of nature the power that enables him to do physical work. The wheel, with its modifications and multiplications, has become a substitute for his mechanical self. We mortals strive now for physical wholesomeness only in the hope that we may be also emotionally, mentally, and spiritually wholesome and fit. Does a sound somatic structure ensure also sound immaterial attributes of the first order? Job, in chanting his immortal stanzas, was harassed by intolerable itching; Homer stumbled about sightless in a homeless world; David probably experienced the mood-swings of a manic-depressive; Caesar had to be ever ready for a seizure; Napoleon was a dwarfish little man; Burns was ever annoyed and embarrassed by more than one insatiable appetite; Byron got about on a club foot of which he was ashamed; were Poe walking the streets of our city today he would probably be sent to the State Hospital at Staunton rather than to the University at Charlottesville; Robert Louis Stevenson was slowly but surely dying while entertaining and cheering a troubled world. It would seem that, if not always, at least frequently, there are compensations, for which we should thank God and take courage.

It may be well that high intellectual endowment cannot always be made certain for human offspring. Were that so, the intellectual aristocrats might soon dominate the world. We know too little about the transmission of intellectual qualities. Germ cells of the rarest quality may lie hidden in the most unattractive tabernacle of clay.

Do I seem to be utterly forgetful of orphans and of mental hygiene? Surely not. I am an orphan myself, only a child in a limitless world, and I am as much in need of a knowledge of mental hygiene and of its beneficences as any other child can be, or as any of you can be, who are playing godmother and godfather to so many children. Why? Because my hygienic ministrations are directed to myself, whose plasticity has been steadily lessened by the roll of the years; and to others, in many of whom childhood has become merely a reminiscence. Even though I am a Virginian by transference and implantation, and a North Carolinian by origin, I shall neither boast of my heredity nor bemoan it. Mine it is by foreordination, and with it I shall try to continue to live with as little discomfort as possible. Nor for those faults within that I reckon as such myself, and many of which I estimate as handicaps, shall I heap blame upon ancestry, near or remote. The torch which came to me from falling hands was borne by them often in times of trial and calamity, and if I can pass it on to my own sons undimmed and still somewhat luminous, I shall hope to escape justified post mortem criticisms and reproaches.

Those innate attributes in ourselves let us first discover and analyze dispassionately. Against the pricks we are commanded not to kick. We must accept ourselves as we are and do for and with ourselves what we can. "Shall the thing formed say unto Him who formed it: Why hast thou made me

thus?" I think often that in complaining of children and of others we are bemoaning chiefly some annoying qualities latent in ourselves, and projecting them unwittingly into others, in defense of ourselves. And those children entrusted to our care—both our own and others, for all children are a joint responsiblity and pleasure—let us discover first what they are both in innate capability and in handicaps. Are we not prone to look upon them either as too near to perfection or as too heavily laden with defects? Most of them, thank God, are reservoirs of potentialities that disclose themselves in such fashion as to keep us on tenter-hooks in suspense and anxiety and apprehension and hope. Do we not often unconsciously make use of our own children as a mechanism through which to attain goals that we ourselves failed to reach and to gratify ambitions that we ourselves fail to achieve? Let us avoid making of them mere mechanistic puppets, manipulated by our own selfish desires.

No other living thing is so rich in potentiality as the child; so interesting, so responsive, so natural in an artificial world; so honest, and perhaps so courageous. The child, if even approximately normal, is truthful to itself. We should not ask it to be always truthful to us, because we are seldom truthful to it, to ourselves, or to others. The child that becomes untruthful and dishonest and cowardly is probably made so by some elder. For we must remember that children enter school at birth —probably years and years before the birth even of their parents—and that their first teachers are their parents, and other children, trained or untrained by parents. We elders are the exemplars of youth. We boldly and without shame (may God have mercy upon us!) tell them so in words and in deeds. We are constantly vitiating their minds and misdirecting their little steps. We think not primarily of their individual self-development, but chiefly about their learning to conform to some standard set up by parents and by society through some or many of its agencies. I feel more and more inclined to tear the word conformity out of my lexicon. What evidence is there that any other living thing than man concerns itself consciously about living by any rule or code?

On two widely separated occasions I visited two industries the productions of which I use and cannot comfortably do without. One was a furniture plant. I followed from the box-car to the conclusion of fabrication into a finished piece of furniture many pieces of lumber. Whether they were gum or sycamore or poplar, they became transformed into what seemed to me to be solid mahogany bedsteads and tables and chairs. And in the cigarette factory the tobacco, whether from Fluvanna, Edgecombe, Connecticut, Turkey, or Madagascar, came out in an endless cigarette which was finally cut into available lengths. Seldom nowadays does the countryman fabricate in his own shop a chair, or crumble into his pipe the dried leaf of home-grown tobacco. Nor does he have so much to do as formerly with rearing his own children or with permitting them largely to fetch up themselves. Some unlucky day a child-labor amendment will be added to the Federal Constitution, and then parents will be deprived entirely of parental authority and responsibility.

Once I knew a man who had fled in boyhood from an orphanage and who subsequently evolved into an occasional liquor drinker, a good poker player, and a brilliant newspaper editor. Had he remained institutionalized he would have been ruined, so he told me, by kindness and by protection and direction. And another such fugitive whom I know became an important constituent of a great corporation, and he is kind to his own kind and to all others. And another whom I know went through his period of institutional moulding and is now an important Federal official. There can be but two real parents—the biologic forebears. The father may be a post partum inconsequentiality not unlike the bridegroom; but there can be no bride-less wedding, and there can be no home without a mother. For her, every substitute is an obvious surrogate. No institution can provide either mother or home. The highest motive and the most persistent effort bring failure to the child, whether it be aware of it or not. The most migratory animal establishes, if permitted, what it thinks of as a home of its own selection. In such a situation only can its behavior be spontaneous and natural. That fact may be especially true of infant man. Only in such an environment and in such an atmosphere is growth and development normal. All human activity is becoming incorporated and institutionalized, and much of it foundationized and philanthropized and governmentalized. The inanimate fabrication cannot offer objection to mass parentage; such parentage may, indeed, be necessary and unobjectionable. But man has the right to insist upon natural, dualized parentage, and to the opportunity for indivdual self-development from within, and not as an imposition from without, even as a gift. I should be the last one to decry the importance of environmental factors, but man should represent an evolvement rather than a receptor.

After all, life represents mainly a continuing effort to gratify certain innate yearnings, and there are not many of them, and happiness depends upon which of these hungers are gratified and in what way. Let us know the child in order that we may know what its yearnings are; and let us help it to satisfy them if they should be satisfied and avoid insisting upon the child's acceptance of our substitute proffers. For we can give the child nothing. Every gift is but the half of an exchange. If the child receives, it must also give. Life is charged with mutualizations. Let us not insist that the child give up self in exchange for any gift. History tells us of many individuals who had in infancy the good fortune to lose their fathers. That gave them the opportunity to develop unhampered.

Now from every conceivable source we are feeling the impingements of the demands to conform, and to modify, if not to give up, our individuality. We are fabricating a civilization so complicated that all of our energy and our resources are being exhausted in our efforts to support it and to adjust ourselves to it. It is sapping us of our strength and our courage and of our belief in our own capabilities. The greatest robber is not some six-shooter racketeer, but it is he who would deprive us of our reliance upon our own capacity to live our own individual lives. Upon all such uplifters let us make unceasing warfare.

With such individualized development is mental hygiene chiefly concerned. The hygienist is interested in the mating of the sexes, in the expectant parents, and with every factor in the lives of the three and with the quality and the force of all influences that play upon them. But the hygienist's chief hope is that the child may be permitted and encouraged to grow and to unfold, for such a phenomenon constitutes a continuing resurrection, and gives an intimation of immortality.

INDICATIONS FOR CESAREAN SECTION*

ANALYSIS OF 312 CASES

DAVID A. BICKEL, M. D.
SOUTH BEND

As much as it may be desired, we have no standardized list of indications for cesarean section. The lack of a definite comprehension of these indications and the conditions under which cesarean section may be safely performed has resulted in an abuse and a condemnation of one of the most valuable of all surgical procedures. A few decades ago this operation was performed only when all other methods of delivery had failed, but today it is being employed for practically every obstetrical complication. In many cases sections have been performed where the natural process or a simple obstetrical maneuver would have safely terminated labor. The widespread resort to this operation is due to the increasing safety which has attended its performance in the hands of a capable few, and also to its apparent simplicity. A better understanding of the indications for the operation and the conditions requisite for its safety, as well as an improved technique, are greatly reducing the mortality in cesarean section.

During the past few years extensive surveys of cesarean section cases have been made in many large cities, thus affording much valuable material for the study of the problem. These surveys give us a cross section of the operation as it is generally being performed as well as an indication of how the tremendous mortality rate following the cesarean section may be reduced. It follows that the indications for cesarean section may be justifiably broadened in proportion, as its mortality and morbidity are lessened.

The material for this discussion of the indications for abdominal delivery resulted from 312 operations performed in general hospitals. Of this number, 299 were performed in the city of South Bend, Indiana, during the ten-year period ending in 1935. The remaining 13 were performed in hospitals outside of South Bend.

This study gives the annual incidence of cesarean section in the entire city birth rate. It also includes the mortality and morbidity resulting from the operation. The morbidity reported here is not based on fixed postpartum temperature criteria, but on definite complications which caused serious discomfort or disablement, or endangered the patient's life. Based on temperature only, according to some prevailing standards, it may be stated that over one-half of these cases were complicated by some degree of postpartum infection.

Table I gives the indications as they were obtained from the hospital records for all the cesarean section cases reviewed. This table shows that in the majority of cases the factors that determined sufficient indication for section are multiple. In many cases only a single indication was recorded; yet, in arriving at the decision that the operation should be performed, more factors than one were doubtlessly involved. As it may be expected, cephalopelvic disproportion with a contracted pelvis, or with what was considered a normal pelvis, was the most frequent indication. Disproportion was a factor in 65.5% of the indications given. These sections were performed by a number of obstetricians, and the clinical findings show some variations of obstetrical judgment.

The diagnosis of cephalopelvic disproportion is one of the most difficult decisions an obstetrician is called upon to make. In the majority of cases where the pelvis is smaller than average or somewhat deformed, the normal process of labor is not interfered with; or labor may be terminated by some such simple procedure as a low forceps operation. Unless one is prepared to make accurate x-ray measurements of the pelvis and the fetal head, he will be obliged in most cases to give the patient a test of labor before determining disproportion of a degree requiring section. External pelvic measurements frequently give us scant information regarding the true pelvis, and are not to be relied upon in making a diagnosis of disproportion although they may give a suggestion of an abnormal pelvis.

A test of labor, if the birth canal is uncontaminated by vaginal manipulation and if the patient is not allowed to become exhausted, is no contraindication to a cervical cesarean section. One hundred six of the cases reviewed had had a test of labor. Unfortunately, we have no standardized criteria for such a test. A number of obstetrical authorities, probably a majority, state that a test of labor takes place only after complete dilation

* Presented before the St. Joseph County Medical Society, March 19, 1935.

of the cervix and rupture of the membranes. There are others who define a test of labor as a given number of hours of strong pains. It is a common observation that labor pains are a subjective response and need not mean effective, sustained and isometric contractions of the uterus. If one follows such a rule, consequently, many unnecessary sections will be performed. Others define a test of labor in terms of the mother's pulse and temperature, and the fetal heart rate. It is obvious that such a test of labor does not consider all the factors involved, and, if rigidly adhered to, would lead to prolonged and unnecessary suffering and ineffective labor. In the present state of our obstetrical knowledge is the belief that the safest general rule for a test of labor is a few hours of pains after complete dilation of the cervix. There will be many exceptions to this rule. The skill and experience of the attendant may allow him to adopt a much shorter test of labor. It should here be mentioned that, while relief must be given the patient during the test, over-narcotization must be guarded against. This applies especially to ether, given by any method. For most men who do obstetrics, a test of labor, although far less desirable than elective section, will be necessary in all but plainly evident cases of disproportion.

TABLE I

INDICATIONS FOR ALL OPERATIONS

	No.	*Per cent*
Contracted pelvis and disproportion	74	23.7
Disproportion and trial labor	65	20.8
Placenta previa	25	8.0
Abnormal presentation and disproportion	21	6.7
Previous section and disproportion	17	5.4
Non-productive labor	13	4.1
Evident disproportion before labor	11	3.5
Persistent posterior position and disproportion	10	3.2
Premature separation of placenta	10	3.2
Pre-eclamptic toxemia	9	2.8
Eclampsia	8	2.5
Posterior position	7	2.2
Toxemia and disproportion	6	1.9
Stenosis of vagina	4	1.2
Post maturity	4	1.2
Contraction ring	3	.9
Heart disease	3	.9
Tuberculosis	3	.9
Desire of living baby	3	.9
Pelvic tumor	2	.6
Amputation of cervix	2	.6
Previous stillbirth. Cause?	2	.6
Heart disease and disproportion	1	.3
Post eclamptic toxemia	1	.3
Suspected monster	1	.3
Fractured pelvis	1	.3
Fetal distress	1	.3
Rigid cervix	1	.3
Allergic condition and previous dystocia	1	.3
Extensive plastic repair	1	.3
Bicornate uterus	1	.3
Diabetes — funnel pelvis — previous dystocia	1	.3
	312	100

Another important factor in dystocia which deserves mention is the function of the uterine musculature during labor. Many cases of dystocia are due to inadequate uterine contractions. This anomaly of the physiology of the uterus is frequently diagnosed as cephalopelvic disproportion. Laferty[1] has pointed out that the shape of the uterus determines its functional activities. If the uterus is conical in shape, we may expect its function to be normal, with well-sustained contractions and thinning of the lower uterine segment with the dilation of the cervix. On the other hand, if the uterus is spherical, it indicates a lack of tone in its musculature and predisposes to abnormalities of presentation; in this case, at the time of labor the dilation of the cervix is delayed and the expulsive force is lacking. This condition, added to a slight degree of disproportion, may present sufficient reason for performing a cesarean section.

The twenty-five sections performed for placenta previa in this series represent two-thirds of all cases of placenta previa treated during the period of this review. There was no mortality in the cases sectioned or in those otherwise treated.

These findings in respect to incidence of section for placenta previa mortality correspond to the reports from various obstetrical clinics. In competent hands, the more serious cases of placenta previa are best treated by section. It is a rapid method of emptying the uterus and a certain method of controlling the hemorrhage. In most of these cases the cervical was preferred to the classical type of section. Abdominal delivery is especially indicated in cases where the pregnancy is near term, where the cervix is undilated, and where the hemorrhage is marked. Many patients with placenta previa, particularly multiparae where the placental insertion is marginal, will safely deliver spontaneously with simple rupture of the membranes.

Like placenta previa, premature separation of the placenta of the severe type, occurring in a woman at or near term with the cervix undilated, is best handled by section. Ten such cases were found in this review. In the grave cases of utero placental apoplexy or Couvelaire type of uterus, the uterus loses its contractile power, and unless it is removed after delivery the patient may bleed to death. If section is performed, the condition of the uterus may be thus determined, and if advisable it may be removed. One such case is included

[1] Laferty, J. M. Effect of Shape of Pregnant Uterus on the Mechanism of Labor. *Am. J. Obst. and Gynec.* 28:586, Oct., 1934.

in this report, where the patient was saved by a Porro cesarean.

When a section is performed for the hemorrhages of late pregnancy, a suitable donor for blood transfusion should always be at hand. Should the patient's condition require it, a transfusion should be effected before the operation.

Malpresentation is not *per se* an indication for cesarean section, but is associated with some other condition, such as disproportion, elderly primiparity, or pre-eclampsia. However, it may be an important factor in determining that the operation should be performed. Here, as is frequently the case in elderly primiparae, breech extraction or version and extraction may prove a considerable risk for the baby. In such cases of breech, transverse, face or brow presentation, section is frequently indicated.

Although this study shows that cesarean section was occasionally performed as a treatment for eclampsia, yet it is not often indicated. The high mortality recorded in the first few years of this report is largely due to the frequency with which eclamptics were sectioned. Section performed under local or spinal anesthesia is frequently indicated in cases of impending eclampsia where disproportion is associated, or it is feared that convulsions would supervene before normal labor could be induced. In most cases of toxemia where termination of pregnancy is indicated, labor may be induced by simple rupture of the membranes.

A previous section in itself is not sufficient reason to repeat the operation. It depends on the indication for the previous section, what type of operation was performed, and whether there was postoperative infection. If the operation had been done for disproportion it might be expected that the same condition was again present and that an elective section would then be proper. Yet, in this group of cases, nine patients were delivered by section who later had easy, normal deliveries.

Heart disease in itself was a given indication for only three sections. It has been our experience that if the cardiac patient is properly treated during pregnancy she need not be subjected to the operation. This observation has been made by many others: Reis and Frankenthal,[2] Fitzgerald,[3] and MacLennon.[4] Section is frequently justifiable and indicated in cases of chronic heart disease if sterilization is to be done.

The indications for section that have been discussed are generalizations. There are many other less frequent indications, such as prolapse of the umbilical cord, pelvic tumors, habitual death of the fetus, extensive plastic repairs, and repaired vesico-vaginal fistulas. In the final analysis, in arriving at the serious decision that a section should be performed, each case must be individually considered.

TABLE II
POSTPARTUM COMPLICATIONS

Ileus	5	Endometritis	1
Pyelitis	5	Peritonitis	2
Parotitis	1	Psychosis	2
Phlebitis	7	Conjunctivitis	1
Cholecystitis	2	Wound infection	11
Massive pulmonary collapse	2		

Table II gives the non-fatal complications which followed the 312 operations. These are the usual complications which follow pelvic laparotomies. It is to be noted that serious complications are far more frequent following cesarean section than following normal or simple operative delivery.

TABLE III
MORTALITY IN ALL CASES IN SOUTH BEND DURING TEN YEARS

Cause of Death	*Classical*	*Cervical*
Cardiac failure	1	0
Peritonitis	6	1
Eclampsia	3	1
Shock	1	1
Ileus	3	0
Pneumonia	1	0
Tuberculosis	1	0
Pulmonary embolism	0	1
Premature separation	1	0
Intestinal obstruction	0	1
	17	5

Total 22—or 7.35 per cent.

Table III shows the mortality and the type of operation performed in the 299 cases in South Bend during a ten-year period. As usual, peritonitis is the most frequent cause of death. The cases reported as ileus may also have been peritonitis. It is very significant that 17 patients died following 116 classical sections, a mortality of 14.6%, while only 5 died following 183 cervical sections, or 2.7%. Six patients died of peritonitis following the classical operations, and only one following the cervical. This is one more report to prove the superiority of the cervical section, or laparotrachelotomy, over the old classical section. Also, with the cervical section, there is much less danger of uterine rupture during future labors than with the classical operation.

In the 137 cases operated personally there were three women with eclampsia who had received no prenatal care, and who entered the hospital in convulsions. They were treated conservatively and, when moribund, were sectioned with the hope of saving the babies. One baby was saved. These deaths were not the result of the operation for the patients would have died regardless of the method of delivery. In the 134 cases where the operation

[2] Reis and Frankenthal. Labor in the Cardiac Patient. *Am. J. Obst. and Gynec.* 29:44, Jan., 1935.

[3] Fitzgerald, J. E. Management of Pregnant Women with Heart Disease. *ibid.* 29:53, Jan., 1935.

[4] MacLennon, H. R. Consideration of Treatment of Pregnancy Complicated by Cardiac Disease. *J. Obst. and Gynec., Brit. Emp.* 40:251, April, 1933.

was performed as a choice method of delivery, there were no deaths. One hundred and twenty-four of these sections were of the low cervical, eight the classical, and two the Porro type of cesarean.

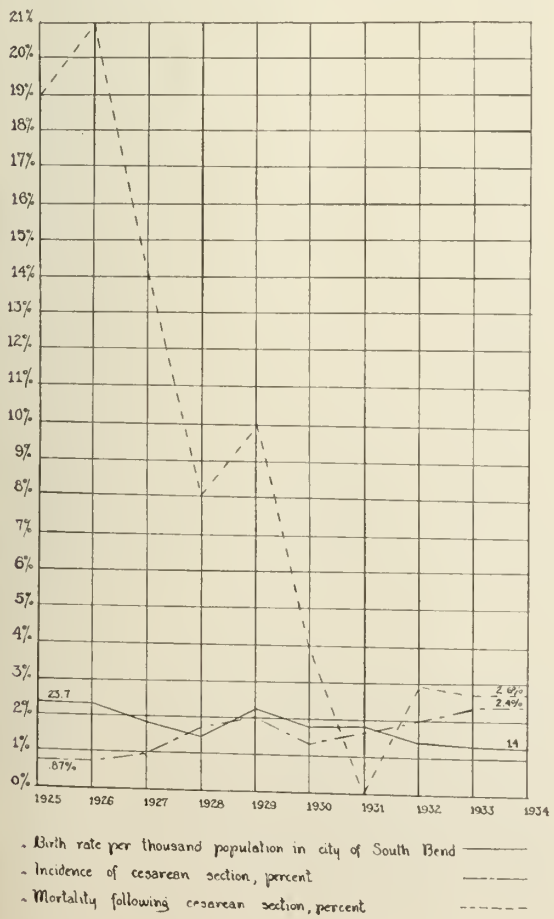
TABLE IV

MATERNAL AND FETAL MORTALITY IN 137 PERSONAL CASES

	Fetal	*Maternal*
Placenta previa	3	0
Disproportion	2	0
Premature separation	2	0
Pre-eclamptic toxemia	1	0
Eclampsia	2	3
	10	3

The accompanying chart shows a composite ten-year report of the birth-rate incidence of cesarean section and cesarean section mortality in South Bend hospitals for the period prior to 1935. One notable feature of this chart is the falling birth-rate from 23.7 to 14.6 per thousand in ten years. This can be explained only by the extensive dissemination of the knowledge of birth control methods.

The incidence of cesarean section is shown here to have increased threefold, which probably indicates that more sections are being performed than actually are necessary. At the present time there is a tendency among obstetricians to resort to abdominal section when, if the attendant were well trained in the obstetric art, other less radical procedures would be safer for the mother; or, it would be better still if more trust were placed in nature. But the most notable feature of the chart is that it shows that the mortality, which ten years ago was about 20%, has fallen to 2.6%. During the first five-year period of the decade the mortality was 14.5%. There are several reasons for the remarkable decrease in mortality. One is that in 1929 both local hospitals instituted a ruling that no cesarean section could be performed without consultation with a member of the obstetrical staff; another, that during the past five years the treatment of eclampsia has been conservative and not operative; but the chief reason is that during the first five-year period all sections were of the classical type, and during the last five years most sections have been of the low cervical type. These figures show that the mortality following classical cesarean section in this small group of cases is almost six times that following the low cervical operation. Dr. A. C. Beck, of Brooklyn, and Dr. Joseph B. DeLee, of Chicago, deserve great credit for developing and popularizing this operation.



CONCLUSIONS

1. Although this review of a small group of cases shows a marked increase in the incidence of cesarean section, there is also a remarkable decrease in mortality from the operation.

2. Following efficient prenatal care and proper preoperative management, the operation can be performed with as little risk as any laparotomy; nevertheless, it carries with it a certain mortality and should never be preferred to a normal delivery or a simple operative delivery from below.

3. Section gives far better results than any other form of treatment in the grave cases of hemorrhage of late pregnancy, but it has no place in the treatment of eclampsia *per se*.

4. These statistics, like all others dealing with cesarean section, show that the low cervical section is far safer than the old classical operation. In grave cases of utero-placental apoplexy, definite infection, or uncontrollable hemorrhage, one should not hesitate to do the Porro operation.

515 Odd Fellows Building.

MEET YOUR FRIENDS IN GARY,
OCTOBER 8, 9, AND 10.
COMPLETE PROGRAM ON PAGE 498

LIGHTING*

HAMILTON ROW, M. D.
INDIANAPOLIS

On looking up the definition of "disease" in Webster's New International Dictionary, we find the olden meanings: "lack of ease; discomfort; trouble." Hence, I have taken the liberty of adopting these early connotations of the word in order to discuss the lack of ease, discomfort, or trouble accruing to our eyes from inadequate and faulty illumination.

At the present time, when light flashes on at the touch of a switch, we incline towards accepting whatever type of light the switch produces, without question as to its adequacy in quantity, or quality. If we think about our light at all, it is only to appreciate its superiority over the candle lights of our grandfathers. Yet, not infrequently, we are forcing our eyes to struggle against handicaps quite comparable to those in the gloomy, candle-lit times of pioneer days.

From a visual standpoint seeing creatures may be divided into two groups: the diurnal, and the nocturnal. In the latter group owls are a striking example. They show remarkable ability in finding their prey and seeing their way about in what is, to us, utter darkness. Man, on the other hand, being in the diurnal group, requires relatively strong intensities of light for efficient vision. Before the advent of civilization, practically all of man's activities were limited to the daylight hours, for, through experience and observation, it was learned that the hazards of stirring abroad, from cave or tree, during the dark hours, were numerous. Thus, we have developed for many, many centuries, and only within the relatively recent time of civilization have we attempted, with any degree of success, to turn night into day.

For satisfactory vision, two considerations are necessary: first, a relatively normal pair of eyes; and, second, adequate light on what we are seeing. The eyes, if deficient, can frequently be improved by treatment, surgery, or the careful fitting of glasses. The light, if deficient, can always be improved.

Extensive experiments have been done, in the past score of years, on vision in relation to lighting. Much of this type of experimentation has been done by Luckiesh, Moss and Cobb, in the lighting research laboratory of the General Electric Company. Rand and Ferree, at the Wilmer Institute, in Baltimore, have also carried out experimentation along the same line, and many other workers have contributed importantly to this subject.

The accepted standard or measure for intensity of illumination, whether artificial or daylight, is based on the amount of light given off by a standard lighted candle, in a dark room, at a distance of one foot. This is known as a foot candle.

* Presented before the Indianapolis Ophthalmological and Otolaryngological Society, February 14, 1935.

When we are out in the sunshine, on a bright summer day, we may have as high an intensity as 10,000 foot candles of available light. This is too much for reading. But in the shade of a tree we find reading quite comfortable. And here we have somewhere in the neighborhood of 1,000 foot candles. Even indoors, on such a day, we may find light equal to about 200 foot candles. But when night comes on many of us read by artificial light of five, or less, foot candles.

Toleration of such wide differences of illumination demonstrates the extreme adaptability of our eyes. But experimental research on lighting has shown that we often abuse our eyes and, through them, our general health, by improper artificial lighting.

There are now available, through most of the electric power companies throughout the country, measuring instruments, known generally as sight meters. These are compact photometers which measure accurately the number of foot candles of illumination available at any point in our offices or homes. Thus, by placing such a photometer on the book we are reading, we can accurately determine the amount of light we have there.

If we accept, as a bare minimum for easy reading, the figure ten foot candles (and experiments to date, on ocular fatigue and its relation to induction of muscular tension, indicate thirty foot candles as more nearly the optimal requirement) it would be a simple matter to adjust our light source close to our book, and let such an arrangement suffice.

But, unfortunately, there are other factors besides light intensity which complicate artificial lighting efficiency. First, there is the element of glare in the light filaments which must be eliminated; next, there is the problem of satisfactory diffusion; and, third, there is the question of light color.

Glare may be defined as a condition of bright light sources, or illuminated surfaces, which cause ocular discomfort or interference with vision. Under glaring light, unnecessary fatigue results. We have all had the annoying experience of reading a page printed on highly glossed calendar paper, and finding a glare, due to faint imaging of the electric light on the paper. This is because of improper diffusion of the light, from its source, to our reading matter.

DIFFUSION

Light is said to be diffused when, by process of reflection and refraction, it reaches the eye from many directions, rather than from the sole direction of the source. Diffusion is usually obtained by the interposition of opal or frosted glass, or by the use of reflectors whose surfaces are corrugated or dulled. This results in some sacrifice of light intensity; however, the seeing value of the light is improved, and glare is reduced. A rough surface

of the ordinary dull finished plaster ceiling is a good example of a diffuser.

Diffusion must be considered, not only from the standpoint of the light on our reading surface, but for the rest of the room as well; for it has been found that deep shadows or gloom, in the distant parts of the room, are undesirable, by causing too much contrast between our working or seeing surface, and its surroundings. Such a condition increases fatigue. A ratio of ten to one is considered sufficient between the illumination of our printed page and the room in general. Thus, if we have twenty foot candles of light on our book, the room throughout should have at least an illumination of two foot candles.

In industrial lighting we find an admittedly much more tangible and accurate measure to compare the results of good and bad lighting in the form of spoilage of raw and semi-finished materials in their course of manufacture. A British factory, working day and night during the war, found that the scrap heap was three hundred per cent larger on the night shift than during the day. Improvement in lighting reduced this difference greatly.

Rand and Ferree, in a recently published article, confine their tests of variable lighting and vision to the quite definite test of visual acuity, instead of fatigue—both muscular and nervous—which are, of course, difficult to evaluate. In this report the authors have divided the test subjects into three age groups, and they conclude, in general, that the older individuals require much more illumination to see with the same acuity as the middle aged subjects; and that the youngest group requires least of the three. The limitation of this particular research is that it is dealing with a threshold. We need a margin over and above the threshold for seeing easily. It must not be forgotten that we are of the diurnal group; and this, then, suggests diffuse daylight as our ideal standard for seeing.

COLORED LIGHTS

The spectral character of lights of varying color have been investigated, in an attempt to determine what the ideal color of light should be.

A most interesting and basic observation on lights of various color is the spectral quality of the light in question. Thomas Young demonstrated that every color in nature can be obtained by varying combinations of red, green, and violet light; whereas these three colors cannot be produced by mixing others. For this reason, red, green and violet are called primaries, and the other prismatic colors—orange, yellow, blue, and indigo—are called secondaries. Green and violet, in varying proportions, produce blue and indigo, while red and green produce orange and yellow. Helmholtz confirmed these findings, so that we now have the very generally accepted Young-Helmholtz theory of color vision.

The primary pigment colors, not to be confused with the foregoing, are red, blue, and yellow. Coloration of mingled lights is due to the sum of the separate wave lengths, while the resultant color given off by the mixture of pigments is due to the reflected wave lengths, after each pigment has absorbed a certain wave length, or series of wave lengths. The tendency of added colored lights is to give increased illumination, and the total approaches white, while, with pigments, a mixture tends toward black.

For general use, white, or daylight, has been found the most satisfactory for vision, although for speed of visual acuity, monochromatic light is best, by elimination of chromatic aberration. However, if we have a blue, or daylight, in our homes the psychic effect is harsh and not so acceptable to us as a light with more red and yellow in it . . . suggestive of the open fireplace. Tests to date, nevertheless, indicate that light, with a spectral quality of daylight, causes slightly less ocular fatigue than any other. This is, again, the kind of light under which our eyes evolved.

Luckiesh and Moss have graphically divided lighting into three links of a chain. The first link they designate "production of light," the second, "control of light," and the third, "the specification or prescribing of light." The first two links are definite and complete. The last is open to their own criticism of being still incompletely scientific, so that present recommendations will, no doubt, undergo revisions as more experimental work is done on the relationship of lighting to ease of seeing, as measured by muscular tension, size of pupil, and pulse rate, all of which appear to have considerable value as measuring sticks to determine the psychophysiologic effects of various light intensities for various types of work. Possibly some as yet unused, more easily arrived-at standards will supplant the above mentioned ones.

It is interesting to observe that the individual is, himself, a very poor judge of lighting requirements; many of us are satisfied to work and read under quantities and qualities of illumination very definitely below minimum standards determined by carefully controlled tests.

Analyzing the factors necessary for vision, assuming a normal pair of eyes, we have first, the angle, in minutes, which the object seen subtends. This angle varies inversely to the distance of the object from the eye. Thus, an object subtending an angle of ten minutes at fourteen inches, subtends an angle of five minutes at twenty-eight inches. The object appears half as large at the greater distance. Next is the contrast of the object with its background. A perfectly black object which has a reflection factor of zero, or, in other words, reflects no light, on a perfectly white background, which, to be perfectly white must have a reflection factor of one hundred per cent, or reflect all light incident to its surface, results in a contrast of one hundred per cent.

A common complaint of patients at about the presbyopic age is their inability to see the numbers in the telephone book. In addition to accommodative failure, two other facts are responsible for this. Comparing the differences between the telephone book and similar sized printing in a well printed book, on high grade book paper, we find:

First, a considerable difference in the reflection factor of the telephone directory's low grade paper and that of the high grade book paper. The reflection factor of the telephone book paper is 57%. That of the high grade book paper is 80%.

Second, contrast between paper and ink. In the telephone directory this contrast is 80%, and in the well printed book it is 97%.

The light brightnesses required for equal visibility in the two specimens of printing are: for the telephone book, 5.4 millilamberts; for the well printed book, 2.6 millilamberts. The Lambert is a measure of brightness of a surface giving off light. It is the average brightness of a surface reflecting one lumen per square centimeter. A lumen equals a quantity of light intercepted by a surface one foot square, every point of which is a distance of one foot from a source of one candle. If the spherical candle power of a lamp is known, multiplying this value by 12.57 gives the number of lumens emitted by the lamp.

The difference in foot candles needed, for the two specimens, to produce the above brightness for threshold visibility, assuming the size of critical details to be seen is about one minute visual angle, is, in the case of the telephone book, 8.8 foot candles; in the case of the well printed book, 3.0 foot candles.

An interesting experiment, of most practical value, was reported by Langdon R. White, assistant surgeon, Rollo H. Britten, associate statistician, James E. Ives, physicist, and Lewis R. Thompson, surgeon, all of the United States Public Health Service, through the United States Department of Health, Public Health Bulletin No. 181. In this research, the sorting of mail, a rather exacting visual effort, was the standard for comparative results. Starting the test with the sorters working under a light of 3.3 foot candles for a period of two months, then decreasing the illumination for a month to 2.7 foot candles, it was found that the visual acuity of the workers decreased. Then, for the next month, the light under which the workers sorted mail was increased to 5.3 foot candles, and the visual acuity of the clerks increased. Next, increasing the levels of illumination on the work to 10.7 foot candles, visual acuity tests showed still further improvement. This improvement continued for a period of five months, all of which time the illumination in the mail sorting rooms was maintained at 10.7 foot candles. Finally, as the illumination in the mail sorting rooms was decreased, the visual acuity of the workers decreased.

Visual acuity tests were made under constant conditions, independent of the working conditions.

This test, extending over a period of more than a year, quite definitely shows that improvement of lighting conditions increased visual acuity, and also shows that deficient lighting on work likewise resulted in a lowering of the visual acuity of the workers.

REFRACTIVE ERRORS

Ophthalmologists are not infrequently confronted with the complaint of failure of vision, headache and fatigue after prolonged use of the eyes for fine detailed work. A large percentage of these cases are relieved by correction of refractive errors, nor would the best of lighting alleviate many of them. But, after our refractive efforts, improper lighting can, and often does limit the degree of comfortable vision obtained by the patient. We must, therefore, as part of our armamentarium, be in a position to advise our patients about light requirements for various types of visual effort.

For arithmetic increase in improvement in seeing, it has been found that light intensities must be geometrically increased, as measured in foot candles. The scale of foot candles given represents, between each number, approximately equal improvement in seeing:

1—2—5—10—20—50—100—200—500—1,000.

In general it may be stated that the intensity of illumination must be doubled in order to obtain a significant improvement in seeing.

A practical working scale of foot candle recommendations, for various types of work, is as follows:

10-20 foot candles for ordinary reading.

20-50 foot candles for moderately critical and prolonged tasks, such as clerical work, ordinary reading, average sewing and needlework on light goods.

50-100 foot candles for severe and prolonged tasks, such as proofreading, drafting, difficult reading, watch repairing, fine machine work, average sewing and other needlework.

100 foot candles, or more, for very severe and prolonged tasks, such as fine needlework, fine engraving, fine pen work, and sewing on dark materials.

906 Hume Mansur Bldg.

HAVE YOU HAD YOUR VACATION?

SPEND A FEW DAYS AT GARY, OCTOBER 8, 9, AND 10

POSTGRADUATE WORK AND PLAY ARE OFFERED YOU.

JAUNDICE*

LYMAN R. PEARSON, M. D.
INDIANAPOLIS

Jaundice is a symptom and not a disease. However, a careful study of patients complaining of jaundice reveals certain well established facts. Courvoisier was one of the first to learn that if an adult develops an obstructive jaundice and has an enlarged and palpable gall bladder, cancer may be suspected; if the gall bladder is not enlarged, one may hope for a benign obstruction. This aphorism or law, propounded in the 1880's, still holds true.

Jaundice which is slight but persistent most probably is independent of obstruction. Jaundice from obstruction becomes intense very rapidly.

When jaundice comes on gradually, ultimately becoming intense, with clay-colored stools, it generally is due to pressure from neighboring structures, especially to diseases of the pancreas, such as chronic interstitial pancreatitis or carcinoma of the pancreas.

Jaundice which does not persist indefinitely, or which recurs time and again, generally is due to calculus obstruction.

When it is of sudden onset, accompanied by colicky pains and clay-colored stools, jaundice generally is due to obstruction within the gall-ducts.

Jaundice following severe paroxysms of pain generally is due to gall-stone formation or to carcinoma. In the latter case there should be a history of failing health before the onset of pain or jaundice.

In the presence of an enlarged liver, jaundice usually is due to cirrhosis of the liver, to cancer of the liver, or to pyemic abscess of the liver.

With ascites, jaundice generally is due to cancer of the liver or to cirrhosis. In the former there are darting pains, loss of weight and intense jaundice. In cirrhosis there generally is a history of alcoholic dyspepsia; the jaundice is generally much less intense than in cancer.

Jaundice with pyrexia is secondary either to acute febrile infection, to suppurative pylephlebitis, or to inflammation of the bile-ducts. Temporary pyrexia may be caused by the passage of a stone through the bile-ducts.

A history of previous attacks of jaundice generally indicates a catarrhal condition of the bile-ducts or the presence of gall-stones.

Cerebral symptoms with jaundice generally are due to acute atrophy of the liver, to poisoning by phosphorus, or to some specific fever such as pneumonia.

In a young person jaundice preceded by symptoms of gastric catarrh generally is "catarrhal jaundice."

Intermittent jaundice, at times slight and again intense, with urine that varies in color from light to dark, with stools that are intermittently dark or clay-colored, with colicky pains, with chills and fever similar to those of malaria, almost invariably is due to chronic calculus obstruction of the common duct.

Jaundice with fatty stools, in the presence of glycosuria, is generally indicative of pancreatic disease.

Increasing jaundice, without remissions, with marked dyspeptic symptoms, with marked increase in neutral fat in the stools, with a positive Cammidge's test, with a positive Sahli's test, is due to pancreatic disease.

Jaundice following general failure of health, increasing until it becomes absolute and never varying, with a greenish tint, with rapid loss of weight, with a distended gall-bladder, with gradual and painless onset, generally is due to carcinoma of the head of the pancreas.

In jaundice due to obstruction, either internal or external, the stools are clay-colored or lighter in color than normal, either continuously or intermittently.

In jaundice not due to obstruction of the bile-ducts, the stools are not clay-colored. It must be remembered that certain drugs, such as bismuth, iron, and charcoal will color the stools; altered, disintegrated blood in the stools will also change the color.

Jaundice is seen in non-calculus cholecystitis only after the inflammatory process in the gall-bladder has extended to the mucous membrane of the cystic and common ducts.

Jaundice accompanied by a leukopenia which does not change to a leukocytosis following the injection of adrenalin, is probably a catarrhal jaundice.

Jaundice arising after a blood transfusion indicates an improperly matched donor.

A hemolytic icterus, resulting from a post natal readjustment of oxygen unsaturation of the arterial blood to a normal saturation, causes jaundice in the new-born. It is not due to hepatic dysfunction.

In many cases of this symptom, both increased blood destruction and decreased hepatic function co-exist and are difficult to separate. When jaundice occurs, it is very vital to appreciate its signficance from both a diagnostic and prognostic viewpoint.

319 Hume Mansur Bldg.

* Presented before the postgraduate course of the Indiana University School of Medicine on May 21, 1935.

CLOSURE OF POST-OPERATIVE WOUND WITH IRRADIATED PETROLATUM

CASE REPORT

WILLIAM DEUTSCH, JR., M. D.
PARKER

The use of irradiated petrolatum in closing post-operative wounds which fail to heal, either after primary or secondary closure, offers a practical therapeutic use for this material.

It has been shown and reported, by various writers,[1] that irradiated petrolatum has a definite use in combating infectious processes, either primary or post-operative. In fact, in many cases there has resulted an almost miraculous action. Eising[2] has reported many cases of infectious processes either cured or greatly improved, leading to a cure by the use of this material. The battle against infectious processes undoubtedly stands as a foremost problem in which the profession is concerned, and I believe that the consideration of clean wounds following operation, in which drainage is necessitated due to hemorrhage or other causes, so that non-closure results, presents also a problem of importance. This problem often can be solved by the use of the material as applied in the case reported below.

It is known that when petrolatum is irradiated it becomes photo-active. Petrolatum is one of the few oils of high viscosity that acquires bacteriocidal properties after exposure to ultra-violet rays, and, combined with its powers to stimulate the growth processes necessary for tissue repair, accounts for its therapeutic properties. It is this last property with which we are concerned in this case.

CASE REPORT

The patient, a white female, age 59, underwent an abdominal exploration on May 16, 1935. The incision was made through the scar resulting from two previous operations. During the operation the surgeon encountered numerous adhesions between the intestines and the left wing of the diaphragm. A large hemorrhage resulted in the breaking up of the adhesions. A large rubber dam drain covered with gauze was inserted in the superior margin of the operative incision extending up under the left wing of the diaphragm. For six days the post-operative course was uneventful, the packing being withdrawn a little each day. On May 23 the patient's temperature rose to 104.6° F. Physical examination was negative. The remainder of the packing was removed and a large amount of serosanguinous drainage was obtained. Following this the wound drained large quantities of this serosanguinous fluid, but at no time was there purulent material present. The temperature immediately returned to normal. On May 26, ten days following operation, the silk worm gut stay sutures were removed, because of their cutting the skin. The skin sutures of chromic catgut No. 2 had sloughed out and the wound now gaped wide open. The incision edges were pulled together and held with butterfly strips of adhesive tape, but to no avail. On May 29 the patient was sent home in good condition, but the wound was open along its entire length and some serous drainage was present. The above treatment of adhesive strips, hot saline packs and bed rest were continued in the home. Laboratory examinations were negative.

The serous drainage gradually lessened and stopped. The operative wound at this time gave the following appearance: about 25 cm. in length, extending from the xiphoid process to about 5 cm. below and to the right of the umbilicus; the wound was approximately 6-7 cm. in depth, extending down to the superficial fascia, the fascia and muscle being intact, and 5-6 cm. intervened between the two walls of the subcutaneous tissue and skin. The edges of the skin and fatty tissue were lined with granulation tissue.

On July 3, under local anesthesia, the old scar tissue together with the subcutaneous tissue was excised down to the fascia by an elliptical incision on each side, and the tissue removed. Three deep silk wormgut sutures were placed running through the superficial fascia and muscle, the fat was closed with plain catgut No. 1, and the skin was closed with chromic catgut No. 2 interrupted sutures. All suture material was tied to allow for swelling, but firm enough to hold the tissues in apposition.

For a week following this secondary closure the wound remained closed and clean. About ten days following this closure the skin around the sutures became inflamed and the sutures began to tear out, and separation in the wound occurred. The silkworm gut stay sutures were removed and the wound gaped open as it did following the primary closure of the operative incision.

I am unable to arrive at any conclusion as to why the wound did not heal; there was certainly no infection, and the only drainage present was that characteristic of granulation tissue. Perhaps sensitization of the skin to the suture material may have had some bearing, although on previous operations through the same area the wound healed after primary closure.

On July 15, the treatment with irradiated petrolatum was instituted, because of the good results obtained with this material in closing sinuses due to tuberculosis and various other infections, and because of its healing properties. The material used was petrolatum jelly irradiated for one-half hour at eighteen inches with the ultraviolet lamp,

(Continued on page xix)

[1] Eising, E. H.: Therapeutic and Physical Properties of Ultra Violet Irradiated Petrolatum. *Ann. Surg.* 93:1231-1239. June 1931.

Thompson, L. and Sheard, C.: Bacteriocidal Action of Irradiated Oils. *Proc. Staff Meetings, Mayo Clinic.* 6:690-691. 1931.

[2] Eising, E. H.: Clinical Observations in the Use of Ultraviolet Irradiated Petrolatum. *Am. Journ. Surg.* Feb. 1933.

THE GARY SESSION

October 8, 9, and 10—the annual session of the Indiana State Medical Association in Gary!

The setting for our 1935 convention, Gary, Indiana, is well known to most of the members of the Indiana State Medical Association, for our sessions were held there in 1928, and many members have attended Gary conventions of other organizations to which they belong. Thus Gary's hospitality and facilities for a successful gathering are familiar to a majority of physicians and surgeons and this may account for the fact that the advance hotel reservations for this year have been the greatest in Association history.



JAMES M. WHITE, President
Lake County Medical Society

An unusually strong technical program this year, Gary's own splendid hospitalization facilities and its fine medical society are combined with the Steel City's extensive entertainment and recreational features to form a record-breaking session from every angle.

THE CITY

Gary's rise in popularity as a convention city is due to a number of factors. The youngest city of 100,000 in the world, it is famous for its civic progress, its modern methods, and its model plan. Building of the city started only twenty-eight years ago after the United States Steel Corporation decided upon this ideal site midway between the ore and stone source of the north and the coal fields of the south. The barren sand dunes along the southern tip of Lake Michigan soon became the world's largest steel mills bordered by a city built upon a model plan.

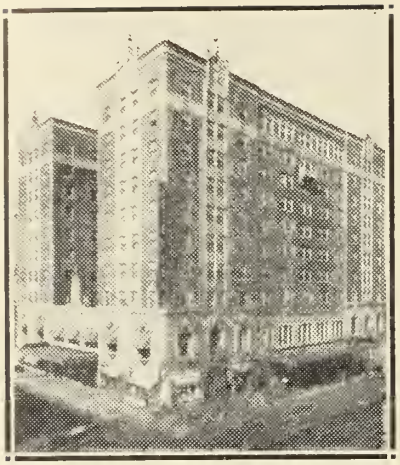
With the expansion of the mills, fine homes were built, the world-famous Gary school system was developed, and is copied today in hundreds of American and foreign cities. A fine park system was developed, featuring a beautiful duneland park along the silver shores of Lake Michigan, forming the finest beach on the Great Lakes and served by a beautiful bathing pavilion and a modern refectory fronting a natural lagoon in the dunes. Always leading in civic advancement, Gary built the beautiful city gateway, a court house and a city hall of twin designs along classic patterns, facing a civic plaza at the entrance of the great steel mills, the only such development in America today.

RECREATION

Recreational facilities in Gary are unexcelled with bathing, boating, and fishing in the blue waters of Lake Michigan or at a dozen nearby inland lakes, with horseback riding and hiking through



PALACE THEATER AND GARY COUNTRY CLUB



HEADQUARTERS, HOTEL GARY

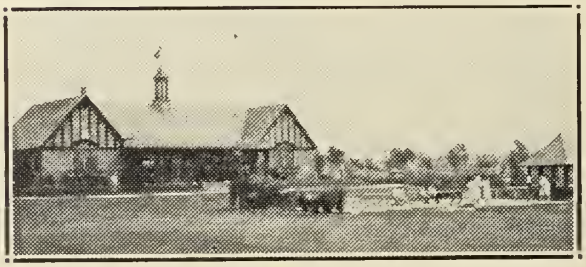
GARY

October 8, 9, 10

1935



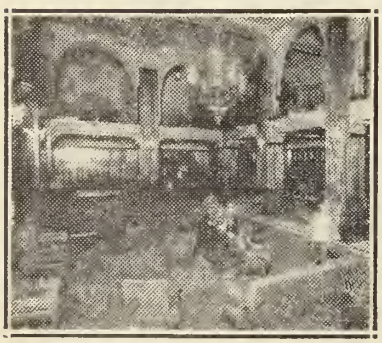
CRYSTAL BALLROOM, HOTEL GARY



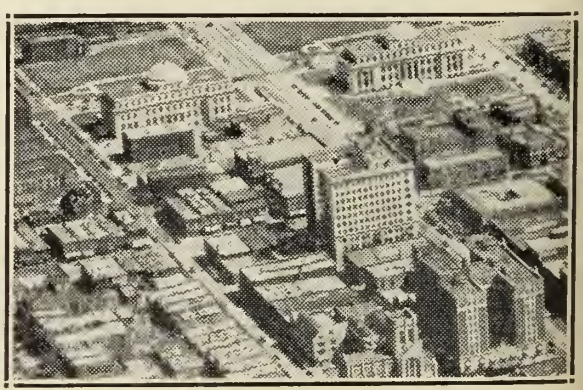
GOLF CLUBHOUSE, GLEASON PARK



PAVILION BATHING BEACH ON LAKE MICHIGAN



LOBBY, HOTEL GARY

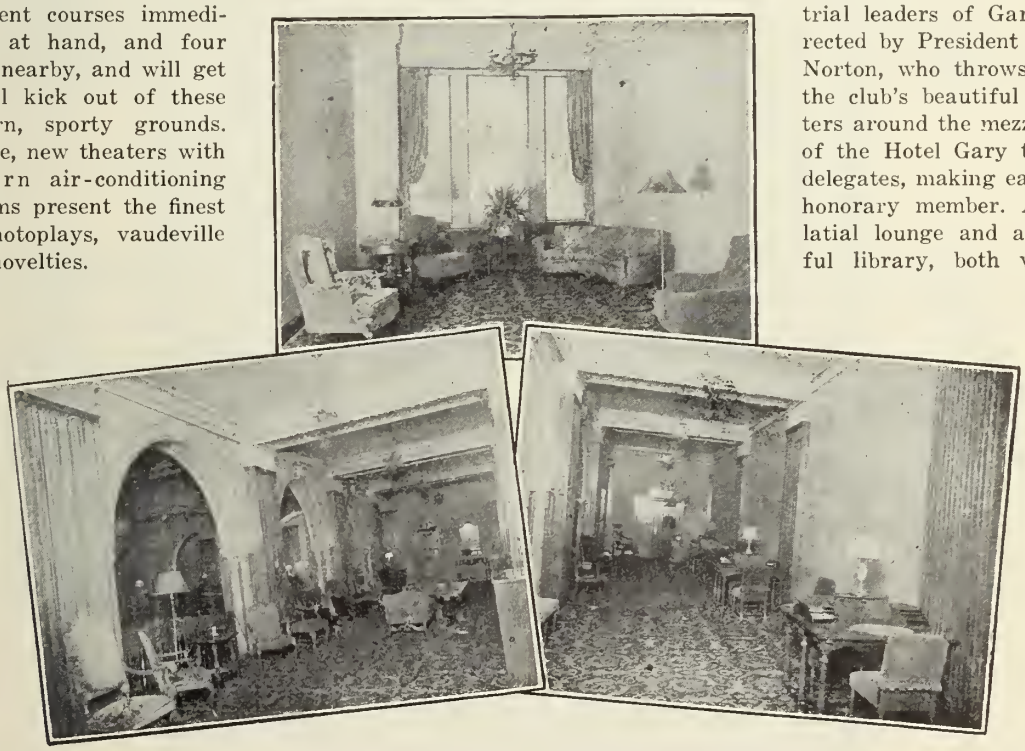


AIRVIEW OF GARY

nature's fascinating dunelands where flowers and plants from the icelands of the Arctic region grow side by side with cactus and desert flowers found only in the vast Sahara Desert; how they came there no one knows, and no other spot in the world has been found where such a phenomenon exists. The dunes themselves intrigue the interest, for you see the shifting sands and where they are creeping upon wooded sections, burying them and then passing on, exposing stumps of trees. You see the tamarack swamps and hundreds of interesting features which nature has provided.

The golfer finds six excellent courses immediately at hand, and four more nearby, and will get a real kick out of these modern, sporty grounds.

Fine, new theaters with modern air-conditioning systems present the finest of photoplays, vaudeville and novelties.



HOTEL GARY MEZZANINE, PROMENADE AND LOUNGE

Tours of the famous schools, industries and other interesting points form a fine combination of entertainment and serious study such as is available in no other midwestern city.

The huge industries of the United States Steel Corporation form the world's largest steel center, and it would require hours to tell of the many modern plants of the Illinois Steel Company, the American Sheet and Tin Plate Company, the American Bridge Company, and the National Tube Company, which are subsidiaries leading the world in production, in modern machinery and methods. A tour of the Gary works of the Illinois Steel Company is a feature of our convention program.

Gary leads in many fields and, as the youngest city of its size, has many modern buildings, churches, and schools, built on new and efficient plans.

HEADQUARTERS

Our headquarters, the New Hotel Gary, is a modern 400-room hostelry, built with special conveniences for entertainment of conventions, such as the beautiful crystal ballroom, mezzanine promenade, lobby lounge, and meeting rooms. It features a popularly priced coffee shop, and air-conditioned Venetian dining room, cocktail lounge and taproom.

The Hotel Gary is the home of the Gary Commercial Club and Chamber of Commerce which is composed of hundreds of the civic, commercial, professional and industrial leaders of Gary, directed by President H. S. Norton, who throws open the club's beautiful quarters around the mezzanine of the Hotel Gary to our delegates, making each an honorary member. A palatial lounge and a restful library, both wainscoted in native American walnut and finished with hand-made furniture and fixtures, together with a recreation room and other facilities, are all at your disposal.

Mayor L. B. Clayton of the city of Gary, as well as President Norton, officially welcomes our delegates and urges every member to attend "for the best time you ever had" and adds that "the keys of the city of Gary are yours."

TRANSPORTATION

Gary is served by six trunk-line railroads, two belt lines, one industrial line, six electric interurban lines, eleven transcontinental and two interstate bus lines, four local taxicab lines, and a modern street railway system.

Gary is in the extreme northwestern county of the state and occupies almost all of Calumet Township; it is thirty miles southeast of Chicago and 163 miles northwest of Indianapolis.



WALTER J. LEACH, M.D.
Indiana State Medical Association
President 1935



ROSCOE L. SENSENICH
President-Elect
South Bend



THOMAS A. HENDRICKS
Executive Secretary and
Managing Editor of The Journal
Indianapolis



A. F. WEYERBACHER
Treasurer
Indianapolis



WILLIAM H. KENNEDY
Chairman Executive Committee
Indianapolis



H. H. WHEELER
Executive Committee
Indianapolis



O. O. ALEXANDER
Executive Committee
Chairman of Council
Terre Haute



E. M. SHANKLIN
Scientific Editor The Journal
Chairman, Committee on
Arrangements
Hammond



DON F. CAMERON
Chairman, Section on Surgery
Fort Wayne



BEAUMONT S. CORNELL
Chairman, Section on Medicine
Fort Wayne



B. J. LARKIN
Chairman, Eye, Ear, Nose and Throat Section
Indianapolis



GEORGE GREEN
Secretary, Section on Surgery
South Bend



W. L. PORTTEUS
Secretary, Section on Medicine
Franklin



RAYMOND CALVERT
Secretary, Eye, Ear, Nose and Throat Section
Lafayette



F. T. ROMBERGER
Editorial Board Member
Chairman, Section on Anesthesia
Lafayette



LILLIAN MUELLER
Secretary, Section on Anesthesia
Indianapolis



ERNEST RUPEL
Editorial Board Member
Indianapolis



THURMAN B. RICE
Editorial Board Member
Indianapolis



PIERCE MACKENZIE
Editorial Board Member
Evansville



L. POTTER HARSHMAN
Editorial Board Member
Fort Wayne

ANNOUNCEMENTS

Members of the House of Delegates: The first meeting of the House of Delegates will be held at 4:30 o'clock in the afternoon of Tuesday, October eighth, in the ballroom, mezzanine floor, Hotel Gary.

Wear your official badge which you will receive when you register.

Please have your pocket cards with you to avoid delay in registration. If you have paid your dues only recently and have not yet received your membership card, present a receipt from your county secretary and you will be permitted to register.

Essayists, please remember that all papers presented before the meetings of the Association become the property of the Association and, therefore, are not to be published or submitted for publication elsewhere than in *The Journal of the Indiana State Medical Association.*

Councilors will have their first meeting in room 328 of the Hotel Gary, at noon, Tuesday, October eighth.

ANNUAL BANQUET

The annual banquet will be served in the ballroom of the Hotel Gary, Wednesday evening, October ninth, at 7:30 o'clock. Speakers will be Dr. J. Tate Mason, of Seattle, Washington, president-elect of the American Medical Association, and Dr. Louis J. Karnosh, of Cleveland, Ohio, assistant clinical professor of nervous diseases in Western Reserve University School of Medicine.

Register immediately upon your arrival. The registration desk will be on the mezzanine floor of the Hotel Gary.

COUNTY MEDICAL SOCIETY OFFICERS

County medical society presidents and secretaries are invited to attend the first meeting of the House of Delegates at 4:30 o'clock on Tuesday afternoon, October eighth, in the ballroom of the Hotel Gary. County society officers will have no power to vote, but are invited to attend because of the many matters of interest to society officers which are to be discussed at that time.

HEALTH OFFICERS

The annual Indiana State Health Officers' Conference will be held at the Hotel Gary, Gary, Indiana, October seventh and eighth. Dr. Verne K. Harvey, director of the Indiana Division of Public Health, is general chairman for the conference.

In the forenoon of Monday, October 7, Dr. Wilson G. Smillie, professor of Public Health Administration, Harvard School of Public Health, Boston, will present a "Discussion of Public Health Administration and Opportunities Afforded by the Social Security Act."

FRATERNITY AND CLASS MEETINGS

Fraternity and class get-togethers and ex-service men's dinners will be held at noon on Wednesday, October ninth, in the private dining rooms of the Hotel Gary.

MEETINGS SCHEDULED

PHI BETA PI: Luncheon meeting, Hotel Gary, noon, Wednesday, October ninth.

PHI RHO SIGMA: Luncheon meeting, room 303, Hotel Gary, Wednesday, October ninth.

FORT WAYNE COLLEGE OF MEDICINE ALUMNI: Luncheon meeting, noon, Hotel Gary, Wednesday, October ninth. Dr. M. E. Klingler, Garrett, in charge.

NORTHWESTERN UNIVERSITY ALUMNI: Luncheon meeting, Hotel Gary, Wednesday noon, October ninth.

ROENTGENOLOGISTS: The Indiana Roentgen Society will have a luncheon meeting in the Hotel Gary, room 328, Wednesday noon, October ninth.

PATHOLOGISTS: The Indiana Association of Laboratory Men will have a luncheon meeting at 12:30 on Tuesday, October eighth, in the Hotel Gary.

ANESTHETISTS: Members of the Section on Anesthesia will have a luncheon meeting Wednesday noon, October ninth, at the Hotel Gary. All anesthetists in attendance at the session are invited.

PEDIATRICIANS: Pediatricians will meet in a special dining room in the Hotel Gary, Wednesday, October ninth, at noon. This will be a luncheon meeting. Officers will be elected. No program has been arranged.

INDIANA SOCIETY FOR OBSTETRICIANS AND GYNECOLOGISTS

Are you interested in the organization of a state society of Obstetricians and Gynecologists, or a section on Obstetrics and Gynecology? If so, will you please sign the following, and mail it to Dr. L. H. Allen, Bedford, Indiana. If enough are interested, an organization meeting will be held during the state meeting at Gary, Indiana:—

.....

I am interested in an Indiana State Society for Obstetricians and Gynecologists. I will attend and support an organization meeting at Gary, during the state meeting.

Signed: Name.....

Address.....

OFFICIAL PROGRAM, ANNUAL SESSION
INDIANA STATE MEDICAL ASSOCIATION

HOTEL GARY
Gary, Indiana

October 8, 9, 10, 1935

(Schedule will be carried out on Central Standard Time)

Monday Evening, October 7, 8:00 p. m. Executive Committee Meeting, Room 317, Hotel Gary

TUESDAY, OCTOBER 8, 1935

MORNING

8 a. m. to 6 p. m. Registration on mezzanine floor, Hotel Gary.

8 a. m. to 6 p. m. Opening of scientific and commercial exhibits, mezzanine floor, Hotel Gary.

9:00 a. m. Annual golf tournament. Eighteen holes, low gross and handicap medal play, Gary Country Club. (Fees, $1.75, including greens fees and luncheon.)

9:00 a. m. Annual trap shooting tournament, Gary Rifle Range.

NOON

12:00 m. Indiana Laboratory Men, luncheon meeting, Hotel Gary.

12:15 p. m. Golfers' luncheon, Gary Country Club.

12:15 p. m. Council luncheon meeting, Room 328, Hotel Gary.

AFTERNOON

2:00 p. m. Trip through Gary steel mills.

4:30 p. m. Meeting of House of Delegates, ballroom, mezzanine floor, Hotel Gary.

EVENING

6:30 p. m. Dinner for women physicians, Triangle Room, Y. W. C. A. Dr. G. G. Campbell will present movies of North Borneo—Life and Medical Methods.

7:00 p. m. Buffet supper, smoker and stag party, ballroom, mezzanine floor, Hotel Gary. Award of golf and trap shooting prizes.

WEDNESDAY, OCTOBER 9, 1935

MORNING

8 a. m. to 6 p. m. Registration continues on mezzanine floor, Hotel Gary.

8 a. m. to 6 p. m. Scientific and commercial exhibits, mezzanine floor, Hotel Gary.

GENERAL MEETING, BALLROOM, MEZZANINE FLOOR, HOTEL GARY

9:00 a. m. Call to order by W. J. Leach, M. D., New Albany, president, Indiana State Medical Association.

Invocation—Rabbi Garry August, Gary.

Greetings and introduction of president of Lake County Medical Society, J. M. White, M. D., by E. M. Shanklin, M. D., chairman of General Arrangements Committee.

9:10 a. m. Address of welcome by J. M. White, M. D., president, Lake County Medical Society.

9:15 to 9:45 a. m. President's address, W. J. Leach, M. D., New Albany.

9:45 to 10:15 a. m. ISAAC A. ABT, M.D., Professor of Pediatrics, Northwestern University Medical School, Chicago.

Subject: "Management of the Infant During the First Three Months of Life."



ISAAC A. ABT

Abstract: Asphyxia, physiological loss of weight, transitory fever, feeding, vaccination against smallpox, and immunization against diphtheria are among the important phases of early infancy. During the newborn period special measures should be taken to prevent asphyxia and subsequent respiratory disease. Asphyxia may arise from pre-natal causes such as anomalies in the great vessels, or may occur during parturition. Loss of weight during the first few days of life is looked upon as normal if it is 150-200 grams. The chief cause of the so-called transitory fever is insufficient fluid intake. Every baby should be given the advantage of maternal nursing. Where artificial feeding is necessary the formulae should be simple so that they may be easily changed to comply with the infant's needs. Infants should be vaccinated against smallpox and immunized against diphtheria.

10:15 to 10:45 a. m. RALPH MILTON WATERS, M. D., Professor of Anesthesia, University of Wisconsin Medical School, Madison, Wisconsin.

Subject: "Inhalation Anesthesia; Newer Developments."



RALPH M. WATERS

Abstract: The discussion will cover briefly the development of inhalation anesthesia, both as to technic and drugs, in Great Britain and the United States.

An attempt will be made to justify the present trends in methods and choice of anesthetic agents on the basis of improved service to patients, hospitals, and surgeons.

10:45 to 11:15 a. m. NORMAN FRITZ MILLER, M. D., Professor of Obstetrics and Gynecology, University of Michigan Medical School, Ann Arbor, Michigan.

Subject: "Cesarean Section."



NORMAN F. MILLER

Abstract: Variability of reported mortality rates following cesarean section suggest that technique and skill are not the only influencing factors. Apparently there exists considerable misunderstanding concerning the indications and contra-indications for this method of delivery. An effort is made fairly to evaluate this operation as a means of delivery and also to clarify some of the confusion which surrounds its indications.

Types of cesarean operations and factors influencing selection of one type over another are also discussed.

11:15 to 11:45 a. m. LOUIS JOSEPH KARNOSH, M.D., Assistant Clinical Professor of Nervous Diseases, Western Reserve University School of Medicine, Cleveland, Ohio.

Subject: "Clinical Aspects of Frontal Lobe Disease."



LOUIS J. KARNOSH

Abstract: With increasing frequency neurosurgeons are making successful extirpations of various portions of the human brain. Of paramount interest are those cases where either one or both of the frontal lobes have been removed, for here are encountered an array of symptoms which have occasioned a great deal of controversy.

Three cases are presented, showing a widely different etiology but all being lesions clearly restricted to the anterior pole of the brain and well away from the motor areas.

In the first instance an Italian woman of 54 years developed a perforating ibro-sarcoma of the frontal bone. The forebrain disease which resulted was responsible for a labile mood state resulting in a manic-depressive psychosis. The patient continued for several years to cycle from one phase to the other and still is subject to abnormal mood fluctuations to the present time.

Case II is that of a male, 54 years old, who was shot through both prefrontal areas causing immediate blindness as well. This injury resulted in a violent personality change, transforming a docile, emotionally stable individual into a violent and vulgar manic.

In Case III a woman is presented and the personality deviations noted after the removal of both frontal lobes because of an infiltrating oligodendroglioma. Approximately 225 gms. of brain tissue were excised. Here again an outstanding feature was a tendency to fluctuating mood, a well preserved mental capacity for simple perceptions, but a definite impairment in judgment, aggressive action, perseverance, concentration and insight.

Frontal and prefrontal brain disease, whatever the organic basis may be, produces a nexus of symptoms which for the present are predominantly of psychiatric rather than of neurologic nature. A tendency to sharp cycling of mood appears to be the most common denominator, hinting at the mental mechanisms which are responsible for manic-depressive psychosis. Other features which are commonly encountered are a loss of insight and lack of concern about health, a failure to form complex mental organizations, but no great impairment of the powers of simple perception, ordinary memory and the receptive and expressive phases of speech function. Occasionally there may be convulsions and almost always there is some degree of ataxia.

NOON

12:30 p. m. Fraternity, class and ex-service men's luncheons and get-togethers, private dining rooms, Hotel Gary. All luncheons will be $1.00 per plate.

Annual meeting of Indiana Roentgen Society, Room 328, Hotel Gary, D. C. McClelland, M. D., Lafayette, president, presiding.

Northwestern Medical School Alumni
Phi Rho Sigma—Room 303
Phi Beta Pi
Ft. Wayne College of Medicine Alumni
Pediatricians
Anesthetists
Obstetricians

AFTERNOON

SECTION MEETINGS

MEDICAL SECTION

Chairman, B. S. Cornell, Fort Wayne
Vice-Chairman, A. S. Giordano, South Bend
Secretary, W. L. Portteus, Franklin

(Ballroom, Mezzanine Floor, Hotel Gary)

2:00 to 2:20 p. m. E. M. VAN BUSKIRK, M. D., Fort Wayne.

Subject: "Benign Tumors of the Stomach."

Abstract: Gastric polyposis: the term polyp used to include large number of tumors, single, multiple, benign, malignant, regardless of histological structure, arising from a mucous surface.

Etiology still a subject of discussion comprising developments of embryological rests, inflammation, or chronic irritation.

Classification of gastric polyposis in general includes three groups: (1) Polyps with independent attachments, sessile or pedunculated, extending from the pylorus to the cardia; (2) polyps with a plaque-like base located in the fundus, and (3) Brunnerian adenoma.

Symptoms of gastric polyposis depend in general on position, size, location and character of the tumor, and in general are due to hemorrhage, obstruction, ulceration or disturbance of gastric function.

Pedunculated tumors may cause pyloric obstruction. Laboratory examination important. Most conclusive information in relation to diagnosis is obtained in x-ray examination of gastro-intestinal tract. Outstanding roentgenological findings are: a central filling defect, the presence of peristalsis, movable tumor mass, normal gastric lumen, and flexible gastric walls.

Gastric polyposis must be differentiated from carcinoma, gastric ulcer, pernicious anemia, functional dyspepsia, sarcoma and syphilis.

Complications of gastric polyposis consist of malignant degeneration, obstruction and hemorrhage.

Treatment: Medical management, use of x-ray or radium, surgical removal of involved part when warranted.

Series of cases reported.

2:20 to 2:30 p. m. Discussion: H. J. Pierce, M. D., Terre Haute.
H. L. Murdock, M. D., Fort Wayne.

2:30 to 2:50 p. m. FLETCHER HALL, M. D., Fort Wayne.

Subject: "Under-treatment versus Over-treatment of Syphilis."

Abstract:

I. Object of Treatment of Syphilis
   a. Welfare of the individual—cure
   b. Welfare of society—control of infectiousness
   c. Welfare of the race—prevention of congenital syphilis
II. Conceptions of Cure
   a. Biologic
   b. Serologic } Clinical
   c. Symptomatic
III. Criteria
   a Of undertreatment } {biological age of the infection
   b. Of overtreatment } {biological age of the patient
   c. Of optimum treatment } {organs and systems affected
IV. Statistical Studies Relating to
   a. Untreated syphilis
   b. Inadequately treated syphilis
      1. from clinical sources
      2. from insurance mortality studies (including original study)
   c. Adequately treated syphilis
      1 from clinical sources
      2. from insurance mortality studies (including original study)
V. Justification for Treatment
   a. Correlation and interpretation of IV a, b and c, (above
   b. Individualization of treatment plan
   c. Summary and conclusions

2:50 to 3:00 p. m. Discussion: F. M. Gastineau, M. D., Indianapolis.
F. W. Cregor, M. D., Indianapolis.

3:00 to 3:20 p. m. H. F. BECKMAN, M. D., Indianapolis.

Subject: "Diabetes with Pregnancy."

Abstract: The appearance of sugar in urine during pregnancy must not be underestimated or assumed to be of the innocuous form. The relationship of pregnancy to the pancreatic disturbance is notoriously inconstant. Sudden crises in the mother are not uncommon, resulting in the death of the fetus and hyperglycemia in the mother.

Long labor produces hyperglycemia; hemorrhage, vomiting, starvation, anesthesia, infection, and even parturition itself create ketosis.

Every woman at all interested in a family should have at least two children, but where this is accompanied by a disproportionate risk to her life or health she should be so informed.

Diet remains the most thoroughly controlled unit of management of diabetes; therefore unless the obstetrician is well schooled in dietetics and insulin therapy, the assistance of one skilled in diabetes is most imperative to obtain best results.

3:20 to 3:30 p. m. Discussion: Pierce MacKenzie, M. D., Evansville.
B. M. Edlavitch, M. D., Fort Wayne.

3:30 to 3:35 p. m. Election of section officers.

3:35 to 3:55 p. m. E. F. KISER, M. D., Indianapolis.

Subject: "The Senile Heart."

Abstract: The heart is a power machine, its efficiency dependent upon the blood supply rather than upon chronological age. Etiology of senile heart: The constitutional factor; hypertension; arthero-sclerosis; infections; diabetes; syphilis; angina pectoris, and coronary sclerosis. Importance of early recognition: fatigue; digestive disturbances; breathlessness; oedema; substernal pain. Diagnosis: importance of history; physical examination; x-ray study; laboratory studies; electrocardiography. Prognosis. Prophylaxis: restriction of business and social activities, physical and mental rest. Treatment: rest, methods of lowering the metabolic rate; drugs; diet; regulated exercise; surgery of the sympathetic nervous system.

3:55 to 4:05 p. m. Discussion: Herman M. Baker, M. D. Evansville.
Bayard G. Keeney, M. D., Shelbyville.

4:05 to 4:25 p. m. LARUE D. CARTER, M. D., Indianapolis
Subject: "Encephalitis."

Abstract: Encephalitis is an inflammatory disease of the brain, in which all the products of inflammation are present. Many non-inflammatory diseases of the brain are erroneously referred to as encephalitis, it often being difficult to distinguish clinically between the two conditions. Different types of encephalitis are recognized: involving different areas and structures of the brain, producing different clinical symptoms and terminating in different ways. The cause, or causes of encephalitis are not known; it is usually regarded as a virus disease. Probably the different types of encephalitis are produced by variants of the same virus. The diagnosis is made on clinical manifestations, as there are no specific laboratory tests. Until the cause is definitely established, treatment is largely symptomatic.

4:25 to 4:35 p. m. Discussion: P. S. Johnson, M. D., Richmond.
L. E. Pennington, M. D., South Bend.

4:35 to 4:55 p. m. L. A. SANDOZ, M. D., South Bend.
Subject: "The Diagnosis and Treatment of the More Common Skin Diseases."

Abstract: Since there is little doubt that dermatology is one of the fields of medicine that receives but little serious attention from the general practitioner, this discussion will, therefore, be intentionally limited to a brief description and usual treatment of some five or six of the most common skin diseases which constitute from sixty to seventy per cent of the entire dermatological practice.

These conditions are psoriasis, acne vulgaris, eczema, the tineas, impetigo contageoso, pityriasis rosae.

It is admitted that there is much to be hoped for in regard to a more satisfactory treatment of each of the above named and of the newer and less tried methods of treatment that are continually being tested. An attempt is made to set forth that treatment which shall be a reliable assistance to the man practicing general medicine.

4:55 to 5:05 p. m. Discussion: John E. Dalton, M. D., Indianapolis.
Harold F. Dunlap, M. D., Indianapolis.

SURGICAL SECTION

Chairman, Don Cameron, Fort Wayne
Vice-Chairman, W. C. Moore, Muncie
Secretary, George Green, South Bend

(Room 328, Hotel Gary)

2:00 to 2:20 p. m. STANLEY H. SKRENTNY, M. D., Hammond.
Subject: "Appendicitis in Children."

Abstract: Appendicitis is a prevalent disease, but nobody has known the exact frequency of its occurrence. It is not one of the reported diseases. It is estimated that at least one person out of every 245 has appendicitis each year. Approximately 10 per cent of all operations performed are done on the appendix. It is not a new disease. Hippocrates, the father of medicine, is supposed to have died of appendicitis in 370 B. C. The death rate of appendicitis has not decreased since Murphy's day and still remains at about 10 per cent in spite of better operative technic. Two-thirds of that mortality, however, occurs below the age of 12 years and over the age of 40 years although not more than one-third of all cases of appendicitis occur within those age groups and it is universally granted that the disease in those periods of life differs in many respects from the disease as it is exhibited in the period of its greatest incidence, namely between the ages of 15 and 40.

There are two important reasons for the high mortality rate in the two extremes of life. First, the very serious character of the pathological changes exhibited. Second, it is much more difficult to diagnose acute appendicitis in childhood than in adult life. We are dealing here with a group of patients who cannot tell their stories coherently, if they can tell them at all, who must have their symptoms and the course of their disease related for them by their parents and nurses who may have entirely overlooked the onset of the illness or who may have misinterpreted what they have seen. In the diagnosis of any disease, the history is much more important than the physical examination. Appendicitis in childhood is frequently attended with an atypical character and is not a disease of sharply classical outlines. Lord Moynihan and the late John B. Murphy among others, have made categoric statements about the symptoms of appendicitis and especially about their chronology which have been repeatedly shown to be erroneous. The so-called appendicitis triad of abdominal pain, nausea and tenderness is very frequently absent in cases of acute appendicitis in childhood. Many cases of acute appendicitis are ushered in with pneumonia-like symptoms of high fever, rapid breathing, fast pulse, etc., others with urinary symptoms, some with diarrhoea, others with constipation, some with chills, some with vomiting but no pain, and still others associated with a sore throat. In other words, in the examination of any child, one should always keep in mind the possibility of this treacherous and highly fatal disease regardless of the symptoms present. The only possible way of reducing the mortality of acute appendicitis in childhood is early operation.

2:20 to 2:30 p. m. Discussion: Sater Nixon, M. D., Indianapolis.

2:30 to 2:50 p. m. PAUL BEARD, M. D., Indianapolis.
Subject: "Conservative vs. Radical Pelvic Surgery."

Abstract: A discussion of conservative and radical pelvic surgery is such a broad subject that only reference can be made to the more common conditions.

In recent years, conservative surgery has been emphasized and rightly so; however, we must not "lean over backwards" in our zeal to conserve useless and crippled tissues or to attempt to repair hernial weaknesses by empirical means.

Re-operations are of common occurrence and our attention must be focused on the conditions responsible for them.

The aim of true conservative surgery should be toward giving the patients their greatest chance of cure and lessening the possibility of re-operation.

2:50 to 3:00 p. m. Discussion: George A. Collett, M. D. Crawfordsville.

3:00 to 3:20 p. m. JOHN W. THOMSON, M. D., Garrett.
Subject: "Cases of Rupture of the Liver."

Abstract:
I. Definition of scope of paper; open wounds of abdomen not considered.
II. Mechanism of injury; falls, run over accidents, etc.
III. Ratio of incidence of viscera injured. Liver most frequently involved; spleen, kidney, pancreas next in order of frequency among solid viscera. Intestine, urinary bladder, stomach and gall bladder in that order for hollow viscera.
IV. Symptoms, signs and diagnosis.
1. General: shock, hemorrhage, etc.
2. Those referable to particular organs: localized pain, swelling, etc.
V. Treatment.
1. Non-operative: treatment of shock.
2. Operative.
VI. Case reports.
VII. Conclusions—Safest procedure to operate all doubtful cases if condition of patient warrants.

3:20 to 3:30 p. m. Discussion: W. H. Baker, M. D., South Bend.

3:30 to 3:50 p. m. W. W. HEWINS, M. D., Evansville.
Subject: "Present Status of Prostatic Resection."

Abstract: History of early beginners. Wave of enthusiasm over country. Believed to be panacea for vesical neck obstructions. Surgeons trying to do resection without knowledge of anatomy, proper preparation and faulty equipment. Reaction against operation because of complications. Field narrowed to those who mastered technique and used proper equipment. Success of operation dependent upon experience and skill of operator. Present status of prostatic resection from statistics of operators throughout the country.

3:50 to 4:00 p. m. Discussion: Ernest O. Nay, M. D., Terre Haute.

4:00 to 4:20 p. m. E. B. MUMFORD, M. D., Indianapolis.
Subject: "The Semilunar Cartilage of the Knee."

Abstract: Injury to the semi-lunar cartilage of the knee is a common lesion—one in which an early diagnosis and appropriate treatment is essential to prevent further changes to the other internal structures of the joint. This lesion is caused by a rotation of the femur upon the tibia with weight bearing through the knee in a position of partial flexion. The initial lesion is to be treated conservatively by restoration of normal position of the cartilage and fixation of the joint for a period of six weeks. In the old or recurrent cases the cartilage should be excised as a cartilage which has been split or torn will not heal and each subsequent attack increases the lesion in the cartilage. The end result is good in seventy-five per cent of the cases, fair in fifteen per cent, and poor in ten per cent.

The atrophy of the quadriceps muscle is found in almost all derangements of the internal structures of the knee joint. The stability of the knee is dependent upon the strength of this muscle, and therefore, the amount of residual atrophy following a lesion of the semi-lunar cartilage is a large and important factor in the recovery and the ultimate end result.

4:20 to 4:30 p. m. Discussion: Lyman T. Rawles, M. D., Fort Wayne.

4:30 to 4:50 p. m. W. D. GATCH, M. D., Indianapolis.
Subject: "Recognition and Treatment of Bowel Obstruction."

Abstract: The classical symptoms of bowel obstruction serve as a general guide to diagnosis. The diagnosis should include, if possible, the site of the obstruction, the cause of the obstruction, and the stage of the obstruction. The importance of a careful clinical history and of x-ray examination of the abdomen. A knowledge of the local and systemic disturbances caused by bowel obstruction essential to its proper treatment. Early cases should be subject to immediate laparotomy. Late cases should be treated conservatively and distention relieved before an attack is made upon the obstruction itself.

4:50 to 5:00 p. m. Discussion: Will C. Moore, M. D., Muncie.

5:00 p. m. Election of section officers.

SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

Chairman, B. J. Larkin, Indianapolis
Vice-Chairman, E. M. Shanklin, Hammond
Secretary, Raymond Calvert, Lafayette
(Room 303, Hotel Gary)

2:00 to 2:20 p. m. HOWARD E. HILL, M. D., Muncie.
Subject: Case report, "Cataract Formation Following the Use of Dinitrophenol."

Abstract: Case report only. No abstract submitted.

2:20 to 2:30 p. m. Discussion: C. W. Rutherford, M. D., Indianapolis.

2:30 to 2:50 p. m. J. V. CASSADY, M. D., South Bend.
Subject: "Otitis Media."

Abstract: Acute otitis media is an inflammation of the middle ear mucosa, with or without perforation of the tympanic membrane. Two types of acute otitis media are differentiated by the pathologic process.

1. Simple acute otitis media.

In this there is no destruction of the mucosa, the perforation occurring by pressure of the exudate. Healing occurs without sequelae.

2. Necrotic acute otitis media.

In this type, for example scarlet fever otitis, there is a necrosis of the mucous membrane and the perforation of the tympanum occurs by necrosis rather than by pressure rupture. The healing process necessarily here leaves sequelae due to the granulation and scar tissue method of repair.

2:50 to 3:00 p. m. Discussion: Russell Sage, M. D., Indianapolis.

3:00 to 3:20 p. m. M. S. HARDING, M. D., Indianapolis.
Subject: "Refractive Technic."

Abstract: Refraction is one of the most important phases of ophthalmology; and the ophthalmologist should be sufficiently interested in this phase of his work to give it the time, effort and careful attention that is required. The various cycloplegics have definite indications for the different age groups and should be used unless there are definite contra-indications.

Various types of refractive methods are discussed and compared. The relationship between muscle imbalance and refraction is so close that no refraction is complete until the status of the extra-ocular muscles has been carefully studied and considered in the writing of the final prescription.

3:20 to 3:30 p. m. Discussion: E. M. Shanklin, M. D., Hammond.

3:30 to 3:50 p. m. B. D. RAVDIN, M. D., Evansville.
Subject: "A Study of the Pathology of the Tympanic Membrane."

Abstract: The object of the paper is to give a rather detailed word and illustrative picture of otoscopic findings that are encountered in the daily practice of otology. Etiology and treatment are not considered.

The following conditions will be considered and illustrated with lantern slides:

1. The normal tympanic membrane
2. Rupture of tympanic membrane
3. Acute inflammatory infections of the tympanic membrane
4. Catarrahal affections of the middle ear
   a. Acute
   b. Chronic
   c. Exudative
   d. Adhesive
5. Acute simple (serious) Otitis Media
6. Acute Suppurative Otitis Media
7. Chronic Suppurative Otitis Media
8. The application of Koerne's law to perforations of the tympanic membrane.

3:50 to 4:00 p. m. Discussion: C. N. Howard, M. D., Warsaw.

4:00 to 4:20 p. m. C. P. CLARK, M. D., Indianapolis.
Subject: "Pathology of the Eye."

Abstract: The first specimen studied is one of glioma of the retina. The essential diagnostic points are cited both previous to operation and in microscopical sections. The specimen cited contains considerable intra-ocular necrosis of the tumor.

The second section is one of melanotic sarcoma of the choroid and ciliary body. The preoperative course of the condition is reviewed; the reasons for enucleation are given; the microscopic characteristics are cited.

An epithelioma involving the lids, orbit, conjunctiva and encroachment upon the cornea necessitated exenteration of the orbit. A section of the eyeball is shown where the epithelioma invades the region of the limbus. The remainder of the eyeball is normal. The case history is reviewed. The orbit was subsequently closed with skin grafts.

The diagnosis of intraocular tumors with indications for removal of the eye or exenteration of the orbit are given.

4:20 to 4:30 p. m. Discussion: E. W. Dyar, Jr., M. D., Indianapolis.

4:30 p. m. Election of section officers.

SECTION ON ANESTHESIA

Chairman, F. T. Romberger, Lafayette
Vice-Chairman, C. N. Combs, Terre Haute
Secretary, Lillian B. Mueller, Indianapolis
(Room 315, Hotel Gary)

2:00 to 2:20 p. m. FLOYD T. ROMBERGER, M. D., Lafayette.
Subject: "Organized Professional Anesthesia."

Abstract: You who here are assembled are the makers of living history. For the first time in the annals of the Indiana State Medical Association, those members vitally interested in the art of anesthetic administration and in the organization of such services in the respective hospitals of our sovereign state, here and now meet in Section conclave for the discussion of our mutual problems.

Of the one hundred forty-five establishments in the state of Indiana organized to take care of the sick, approximately one hundred are general hospitals for both medical and surgical patients. These institutions vary in capacity from twenty to more than five hundred beds. Aside from those anesthesias administered in the office or in the home, this is our field. Not only must we be ready and qualified, but, also, we must be willing to cooperate with the hospitals, the profession, and the laity, all for the public weal. The cloth must be cut to fit many and varying patterns. Much of the work will be routine; some, highly specialized. Full-time and/or part-time service must be arranged, as indicated, all within the dictum that anesthetic administration is medical practice.

Reasonableness of action and charity of mind toward the opinion of others are essential requisites. The future of anesthetic practice in this state, perhaps in the entire country, is in your hands. Right now.

2:20 to 2:30 p. m. Discussion: Clarence Baker, M. D., Evansville.

2:30 to 2:50 p. m. A. L. SCHWARTZ, M. D., Cincinnati
Subject: "Professional Anesthesia; A Hospital Plan in Operation Eighteen Years."



A. L. SCHWARTZ

Abstract: The problem of professiona versus nurse anesthesia is approached from a new angle. The fault lies with the medical profession and is reflected in the medical colleges. A survey of the medical colleges in the United States reveals the inadequacy of training in anesthesia. The existence of the inexperienced and occasional user of anesthetic agents, as mentioned by Lundy, is deplored.

Our future anesthetists can be recruited from practicing internists who are interested and obtain post-graduate training in anesthesia and from graduates in medicine who have been trained in anesthesia in the medical schools and hospitals. Anesthesia is as much a specialty as pediatrics or obstetrics. Omission of these special courses would raise a hue and cry.

Assuming an adequate number of competent professional anesthetists is available, a workable plan for hospitals is presented. This plan has been in operation for eighteen years at the Jewish Hospital, Cincinnati, Ohio. All of the staff anesthetists are practicing internists. Every operative case, free or pay, is given the same anesthetic care. The remuneration is sufficient to attract men of high caliber. In conclusion a tribute to the anesthetists by Dr. Arno B. Luckhardt is quoted.

2:50 to 3:00 p. m. Discussion: M. L. Axelrod, D.D.S., Cleveland, O.

3:00 to 3:20 p. m. LILLIAN B. MUELLER, M. D., Indianapolis.
Subject: "Avertin Anesthesia; A Review of 3,000 Cases."

Abstract: This paper comprises a report of approximately 3,000 administrations of Avertin at the Methodist Hospital, in Indianapolis, since January 1st, 1933, without a death or a serious complication.

A brief description of Avertin and its physiological action. A classification of various types of cases in this series, and an analysis of the applicability of Avertin to each type. Case reports.

3:20 to 3:30 p. m. Discussion: C. N. Combs, M. D., Terre Haute.

3:30 to 3:50 p. m. RALPH M. WATERS, M. D., Madison, Wisconsin.
Subject: "Teaching Value of Records."

Abstract: The position is taken that the bare "impressions" of any member of the surgical team in regard to the results of a given anesthetic drug or technic are not only faulty but misleading.

Certain efforts at record keeping in the Department of Anesthesia at the Wisconsin General Hospital are described with a hope of emphasizing the value of the results of such an effort as used in teaching the anesthetist, the

undergraduate and graduate student as well as the surgeon what comparative results may be expected from the various technics and drugs used in anesthesia

3 50 to 4:00 p. m. Discussion: J. S. Lundy, M. D., Rochester, Minn.

4:00 p. m. Election of section officers.

WEDNESDAY EVENING, OCTOBER 9, 1935

7:30 p. m. **Annual Banquet, Ballroom, Hotel Gary.**
Presiding officer, W. J. Leach, M. D., president, Indiana State Medical Association.
Presentation of certificate of merit to E. E. Padgett, M.D., president 1934, by W. J. Leach, M.D.



J. TATE MASON

J. TATE MASON, M. D., Seattle, Wash., President-elect, American Medical Association.
Subject: "The Work of the American Medical Association."

LOUIS JOSEPH KARNOSH, M. D., Assistant Clinical Professor of Nervous Diseases, Western Reserve University, School of Medicine, Cleveland, O.
Subject: "Insanities of Famous Men."

THURSDAY, OCTOBER 10, 1935

MORNING

7:00 a. m. House of Delegates breakfast meeting, Venetian Room, lobby floor, Hotel Gary. Annual election of officers and selection of convention city for 1936.
Meeting of Council immediately following adjournment of House of Delegates, Venetian Room, Hotel Gary.

8 a. m. to 12 noon. Registration continues on mezzanine floor, Hotel Gary.

8 a. m. to 12 noon. Scientific and commercial exhibits, mezzanine floor, Hotel Gary.

GENERAL MEETING, BALLROOM, MEZZANINE FLOOR, HOTEL GARY

9 to 9:30 a. m. VIRGIL S. COUNSELLER, M. D., Assistant Professor of Surgery, University of Minnesota, Graduate School of Medicine, Minneapolis-Rochester, Minnesota, and chief of a Surgical Section at the Mayo Clinic, Rochester, Minn.
Subject: "Some Changing Concepts Regarding the Endometrium and Their Significance."



VIRGIL COUNSELLER

Abstract: The essential features of the menstrual cycle have been studied and also recorded previously; however, there has not been a sufficiently clear correlation between the observed state of the endometrium and the various clinical pictures. Recent investigations of the histological appearance of the endometrium through the complete cycle have produced some new concepts regarding its regenerative phenomena. The work is reviewed, and the histological state of the endometrium and the clinical histories are correlated. The practical clinical application of these observations is emphasized.

9:30 to 10:00 a. m. SANFORD R. GIFFORD, M. D., Professor of Ophthalmology, Northwestern University Medical School, Chicago.
Subject: "Problems of Senile Cataract."



SANFORD GIFFORD

Abstract: A short review of the development of the lens as it concerns the various types of cataract. The differentiation of different types of cataract, the biology of senile cataract, the time for operation in different types of cataract, operative methods and the results obtained.

10 to 10:30 a. m. ELEXIOUS THOMPSON BELL, M. D., Professor of Pathology, University of Minnesota Medical School, and University of Minnesota, Graduate School of Medicine, Minneapolis-Rochester, Minnesota.
Subject: "Pathology of Tumors of the Breast."



E. T. BELL

Abstract received too late for publication.

10:30 to 11 a. m. WILLIAM F. BRAASCH, M. D., Professor of Urology, University of Minnesota, Graduate School of Medicine, Minneapolis-Rochester, Minnesota.
Subject: "Recent Advances in the Treatment of Infections Involving the Urinary Tract."



W. F. BRAASCH

Abstract: Our conceptions of therapy with infections of the urinary tract are changing rapidly. Closer attention is paid to bacteriology.

Our knowledge of bacteria involved in urinary infections has been greatly increased in recent years. This is particularly true in regard to response to different types of treatment of the various bacterial genera and species. Some of the characteristics of bacteria usually observed with urinary infection.

The importance of the ketogenic diet and recent modifications; changing conceptions in its application. While acidification of the urine with the ketogenic diet is important, the influence of beta-oxybutyric acid is probably of greater therapeutic value.

The relation of bacteria to renal lithiasis is of considerable importance. Our conceptions of bacteria as an etiologic factor in lithiasis have changed.

Cultural methods in the identification of Neisseria gonorrhoeae have proved to be of great aid in diagnosis. The application of heat with gonorrheal infections has proved to be of great therapeutic value in many conditions other than urethritis.

Intravenous therapy is often indicated in persistent acute infection of the urinary tract.

11 to 11:30 a. m. LOUIS GEORGE HERRMANN, M. D., Assistant Professor of Surgery, University of Cincinnati College of Medicine, Cincinnati, O.
Subject: "Passive Vascular Exercise Method of Treating the Obliterative Arterial Diseases of the Extremities."



LOUIS G. HERRMANN

Abstract: This paper will consist of a discussion of the recent advances in the diagnosis and treatment of the more common types of organic arterial diseases. Emphasis will be placed on a simple yet accurate means of differential diagnosis for clinical practice. The mechanism by which arterial insufficiency in the distal portions of an extremity is overcome spontaneously will be demonstrated. The theory and practice of passive vascular exercises as a physiologic means of stimulating, from the therapeutic standpoint, the circulation of blood through collateral arterial pathways, together with the effects of passive vascular exercises combined with various degrees of local hyperthermia will be presented. The results obtained during the past three years, during which we applied more than 50,000 hours of this type of therapy will be discussed

and the course of various types of serious complicaions of these disturbances with and without passive vascular exercises will be illustrated by lantern slides. The method will be shown to be an efficient means of preventing the serious sequelae of arterial insufficiency due to obliterative arterial diseases of the extremities.

11:30 to 12 m. EMMET F. HORINE, M. D., Associate Clinical Professor of Medicine, University of Louisville School of Medicine, Louisville, Kentucky.

Subject: "Practical Management of Cardio-Vascular Emergencies."



EMMET F. HORINE

Abstract: The treatment of such cardio-vascular conditions as are apparently dangerous and of sudden onset is outlined. Syncope from extrinsic and intrinsic cardiac factors, paroxysmal dyspnoea, acute pulmonary edema and coronary thrombosis as well as less frequently encountered emergencies are discussed from the standpoint of the pathologic-physiology. The differential diagnosis of the various emergencies is briefly reviewed.

PROGRAM FOR WOMEN'S ENTERTAINMENT AND WOMAN'S AUXILIARY TO THE INDIANA STATE MEDICAL ASSOCIATION

TUESDAY, OCTOBER 8, 1935

9 a. m. to 6 p. m. Registration on mezzanine floor, Hotel Gary.

Reception committee headed by Mrs. C. A. DeLong, of Gary, in charge to greet guests.

2:00 p. m. Trip through Gary steel mills.

8:00 p. m. Theater party, Palace Theater.

WEDNESDAY, OCTOBER 9, 1935

8:30 a. m. Breakfast and annual business meeting, Woman's Auxiliary to the Indiana State Medical Association, Venetian Dining Room, Hotel Gary.

Mrs. Edmund D. Clark, president, presiding.

Program:

Invocation—Mrs. Earl D. Skeen, Gary.

Address of welcome—Mrs. E. M. Shanklin, Hammond.

Business:

Reading of the minutes by the Secretary, Mrs. Ernest O. Nay, Terre Haute.

Report of Treasurer, Mrs. Charles F. Neu, Indianapolis.

Reports of state chairmen:

Organization, Mrs. Frederick B. Wishard, Anderson.

Legislation, Mrs. I. N. Trent, Muncie.

Hygeia, Mrs. George R. Dillinger, French Lick.

Press and Publicity, Mrs. O. G. Pfaff, Indianapolis.

Historian, Mrs. John T. Wheeler, Indianapolis.

Reports of presidents of county auxiliaries.

Report of National meeting at Atlantic City, Mrs. George R. Dillinger.

New business.

Election of officers.

Address—Guest speaker, Mrs. Rogers N. Herbert, Nashville, Tennessee, national president, Woman's Auxiliary to the American Medical Association.

12:30 p. m. Luncheon-bridge at the Marquette Park Pavilion—Co-chairmen, Mrs. H. M. Baitinger and Mrs. J. B. Burcham. For wives and families of physicians attending the convention. Automobile transportation at Hotel Gary.

SCIENTIFIC EXHIBIT

ERNEST RUPEL, M.D., DIRECTOR
CLYDE G. CULBERTSON, M.D., ASSISTANT DIRECTOR

I Council on Physical Therapy of the American Medical Association. Thomas G. Hull, Ph.D., director, Bureau of Exhibits.

II American Society for the Control of Cancer. F. L. Rector, M.D., field representative.

III Scientific Exhibit of the Indiana Pharmaceutical Association, prepared by Purdue University School of Pharmacy. Professor Henry W. Heine.

IV Indiana Roentgen Society. L. A. Smith, M.D., chairman, Exhibit Committee.

V Indiana State Division of Public Health. Verne K. Harvey, M.D., director. Bynum Legg, director, Bureau of Health Education.

VI Indiana University School of Medicine, Division of Plastic Surgery. Harold M. Trusler, M.D.

COMMITTEE CHAIRMEN FOR 1935 SESSION INDIANA STATE MEDICAL ASSOCIATION

General Arrangements—E. M. Shanklin, Hammond.

Finance Committee—Frank J. McMichael, Gary.

Entertainment Committee—R. N. Bills, Gary.

Lantern Committee—O. B. Nesbit, Gary.

Hotels Committee—E. L. Schaible, Gary.

Golf Committee—C. C. Brink, Gary.

Women Physicians—Georgiana Lutz, Gary.

Women's Entertainment—Miss Allegra Nesbit, Gary; Miss Kae G. Oberlin, Hammond.

Reception Committee—James M. White, Gary, president, Lake County Medical Society; George M. Cook, Hammond, president-elect, and all members of the Lake County Medical Society.

Fraternities and Class Reunion Committee—E. D. Skeen, Gary.

MAKE YOUR RESERVATIONS FOR THE ANNUAL BANQUET EARLY. RESERVATIONS WILL BE LIMITED TO FOUR HUNDRED.

GOLF AT GARY!

25 — GRAND PRIZES — COUNT 'EM — 25!

SPECIAL PRIZES FOR
ACCURATE DRIVING — ACCURATE PUTTING

WHERE

The Indiana State Medical Association Annual Golf Tournament will be held at the Gary Country Club.

* * *

WHEN

Tournament will begin at 9:00 a.m., Tuesday morning, October 8, 1935. Busses will leave the Hotel Gary promptly at 8:30 a.m. and 9:00 a.m., Tuesday morning, to take golfers to the Gary Country Club.

* * *

LUNCHEON

Luncheon will be from 12:00 to 1:00, so that players may have ample time to take the trip through the steel mills in the afternoon, if they desire to do so.

* * *

FEES

Greens fee and luncheon, $1.75. Greens and fairways are all that any golfer could want. Luncheon will make the vanquished forget their defeat. All for $1.75.

* * *

CONVEYANCES

Busses will leave the Hotel Gary at 8:30 and at 9:00 a.m., to take those physicians who desire to go to the Gary Country Club.

TROPHIES

1. First, second, third, and fourth low gross.
2. First, second, third, and fourth low net. For this event each player must bring handicap signed by pro of his own club. (See coupon attached).
3. First high gross.
4. First high net.
5. First, second, third, and fourth blind bogey (selective handicap).
6. Distance driving contest.
7. Target at No. 1 tee.
8. Accuracy from tee to No. 9 green.
9. Other awards will be determined later, and there will be approximately twenty-five nice trophies.

* * *



OTHER INFORMATION

The tournament will be eighteen holes, medal play, U. S. G. A. rules.

There will be plenty of lockers and caddies.

We want 200 or more golf addicts for the events. All that can be desired in the way of fairways, greens, water and bunker hazards, etc., are promised. (And don't forget—all this for a total of $1.75, including luncheon!)

Route to the Gary Country Club: Out Broadway to 45th Avenue, turn right to Cleveland Street, then south to the Club. Distance is about five miles from Hotel Gary.



P-ss-st! He forgot to bring his certified club handicap—so he can't compete for the low net trophies!

WILL THIS BE SAID OF YOU?

COUPON

FILL IN—AND BRING WITH YOU, OR SEND TO DR. C. C. BRINK, 807 GARY STATE BANK BUILDING, GARY, INDIANA:

I certify that the club handicap of

Dr. _____

is _____

_____
Club Professional

OFFICIAL CALL TO THE HOUSE OF DELEGATES

The next annual session of the Indiana State Medical Association will be held at Gary, October 8, 9, and 10, 1935.

The House of Delegates will be constituted as follows: Marion County, nine delegates; Lake County, four delegates; Allen County, three delegates; St. Joseph County, three delegates; Tippecanoe County, two delegates; Vanderburgh County, two delegates; Vigo County, two delegates; the other seventy-five county societies, each one delegate; thirteen councilors; the ex-presidents, namely: C. S. Bond, W. N. Wishard, J. C. Sexton, G. W. McCaskey, J. B. Berteling, Joseph R. Eastman, W. H. Stemm, C. H. McCully, W. R. Davidson, E. M. Shanklin, Charles N. Combs, Frank W. Cregor, George R. Daniels, Charles E. Gillespie, Angus C. McDonald, A. B. Graham, F. S. Crockett, J. H. Weinstein, and E. E. Padgett. In addition to these, the president, secretary, and treasurer, all without power to vote except in case of a tie, when the president shall cast the deciding vote.

Blank credentials have been sent by the secretary to each county society, and the properly executed credentials should be mailed to Thomas A. Hendricks, 1021 Hume Mansur Building, Indianapolis, or brought to the session. No delegates will be seated unless wearing the official badge.

The House of Delegates will convene promptly at 4:30 p. m., Tuesday, October 8, in the ballroom, mezzanine floor, Hotel Gary, and again at 7:00 a. m., Thursday morning, October 10, in the Venetian room, Hotel Gary (breakfast meeting).

The order of business will be as follows:

1. Call to order by the president.
2. Roll call and seating of qualified delegates.
3. Reading of the minutes of previous meetings.
4. Appointment of reference committees.
5. Report of the executive secretary.
6. Report of the treasurer.
7. Report of the chairman of the council.
8. Reports of standing and special committees:
   a. Credentials.
   b. Executive.
   c. Arrangements.
   d. Scientific Work.
   e. Legislation and Public Policy.
   f. Journal Publication.
   g. Bureau of Publicity.
   h. Civic and Industrial Relations.
   i. Medical Education and Hospitals.
   j. Necrology.
   k. Secretaries' Conference.
   l. Graduate Education.
   m. Diphtheria Prevention.
   n. Study of Health Insurance.
   o. Veterans' Hospitalization.
   p. Study of High School Athletics.
   q. Public Relations.
   r. Lye Burns in Children.
   s. Study of Puerperal Mortality.
   t. State Fair.
   u. Mental Health.
   v. Expert Testimony.
   w. Prevention of Traffic Accidents.
   x. Delegates to the A. M. A.
   y. Statistician.
   z. Historian.
9. Reading of communications.
10. Reading of memorials and resolutions.
11. Unfinished business.
12. New business.
13. Adjournment.

The election of officers will be the first order of business at the second meeting of the House of Delegates. In addition to the regular officers, the terms of the following officers expire December 31, 1935, and their successors must be elected at the session: Delegates to the American Medical Association to succeed Don F. Cameron, Fort Wayne, and F. S. Crockett, Lafayette, and alternates, W. F. Carver, Albion, and G. D. Scott, Sullivan.

Delegates from the first, fourth, seventh, tenth, and thirteenth districts are reminded that the terms of their councilors will expire December 31, 1935, and new councilors should be elected to succeed the following:

First District: I. C. Barclay, Evansville.
Fourth District: H. P. Graessle, Seymour.
Seventh District: L. A. Ensminger, Indianapolis.
Tenth District: N. K. Forster, Hammond.
Thirteenth District: W. B. Christophel, Mishawaka.

Some of these elections already may have been held but they should be reported to the House of Delegates at this session for confirmation.

The name of the physician appointed to complete the unexpired term (December 31, 1936) of the late Dr. George D. Miller, of Logansport, councilor of the Eleventh District, should be reported at this time.

Thomas A. Hendricks,
Executive Secretary.

REPORT OF COMMITTEE ON CREDENTIALS

House of Delegates, Indiana State Medical Association:

Gentlemen:

Because of the death of Doctor George D. Miller, chairman, this committee has no formal report to make at this time. The committee will make a report at the Gary session.

Respectfully submitted,

J. W. Bowers, M. D.
P. H. Schoen, M. D.

REPORT OF THE EXECUTIVE SECRETARY

House of Delegates, Indiana State Medical Association:

Gentlemen:

Undoubtedly the year 1935 will be long remembered as one of the most critical in American medical history and may become known as the year which brought real unity of action to the efforts of medical organizations throughout the state and nation. As executive secretary of the Indiana State Medical Association it has been my privilege to read the annual reports prepared by the various committees of the State Association before their publication, and it truthfully may be said that never in the history of this Association has a group of reports as a whole been so comprehensive, so vital, so far-reaching, so significant. They throw light as nothing else perhaps does upon the complicated, fast-moving, ever-changing social and economic picture as it pertains to medical practice in this state and give some hint of the scope of work of your state organization, the problems faced today by the profession, and the never-ceasing attempts being made to find solutions for these problems.

Each of these state committees has worked in its own special field, each committee has attacked the problems coming in its particular province, so that in order to obtain an understanding of the present status and the progress made by the profession of the state in general and by the medical organization in particular during the past year, we urge each doctor in Indiana to devote an evening or so to these reports and we earnestly suggest that every delegate be thoroughly familiar with their contents before the House convenes at Gary the afternoon of Tuesday, October 8.

Little is left for your secretary to add to these reports.

Last year in our annual report we stated that the principles promulgated and the actions taken by the House of Delegates in that session would determine to a great extent the future course of the Indiana State Medical Association as an organization and the career of the individual members of the profession now in practice and those who will be the future doctors in our state. The House acted with decision and wisdom, the challenge of state medicine was met by a united profession in this state, and despite several uncertain moments when it was feared that the socialization of medicine might inevitably result, today the practice of medicine stands upon as sound and as firm a basis as ever in the history of Indiana.

From an economic standpoint there is no doubt but that the individual doctor is better off than a year ago. With the return to better times no reason exists why the financial condition of the doctor should not be more secure than it has been since 1929. This better feeling is particularly evidenced in rural communities and within the last month it seems to have crept into the city offices.

During the year your secretary has had the pleasure of accepting invitations to every district society in the state except two (due to conflicting dates) and most of the component county medical societies. The results of these visits have been stimulating to your secretary and he takes this opportunity to thank the groups for inviting him and to report to the House of Delegates that intelligent, energetic attention to the multiplicity of problems at hand is being given by almost every county society in the state.

Although this year, as well as all the others which have passed only too quickly since being connected with the Association, carries many happy memories, it is always with sadness that we think of the men who have died. I am thinking at this time particularly of Dr. George Miller of Logansport who was so active in past years in the House of Delegates as chairman of the Credentials Committee and who for the last two sessions served the profession of this state so loyally and ably in the senate. It is hoped that someone in the profession will take the place in the General Assembly left vacant by Senator Miller.

After reading reports of your 1935 committees and visualizing the situation as a whole, the physicians of Indiana should be able to face the future with the knowledge that the Indiana State Medical Association is not a static body composed of officials with high sounding titles and "paper" committees, but it is an alert, active, aggressive organization which is in the battle to the last for the profession and the public welfare.

Respectfully submitted,

THOMAS A. HENDRICKS,
Executive Secretary.

REPORT OF THE TREASURER

House of Delegates, Indiana State Medical Association:

Gentlemen:

This year's report consists of the combined audit of the Association and THE JOURNAL accounts. The audit was made by W. C. Mendenhall, and is appended to this report. In addition to the formal audit, some activity has taken place in the treasurer's department concerning which you should be informed.

(1) Previous to this year, the only person in the executive office who has been bonded was the treasurer. With the permission of the executive committee, all members of the headquarters office who handle funds are now bonded.

(2) During the first three months of the year when practically all of our dues come in, we carry a rather large checking account. This year five $1,000 U. S. Treasury bonds were purchased and placed in our safety deposit box. If, by the end of the year, it is necessary to add some amount of this new purchase to the checking account, the

bonds are readily salable. While the rate of interest on the treasury bonds is low, our checking account pays no interest whatsoever.

(3) A detailed report of the Medical Defense Fund is given in the Executive Committee report. Our account this year shows a balance considerably larger than last year, so it is perhaps not unreasonable to think we may be able to add something to the Medical Defense Reserve Fund by the end of the year.

Subject to your approval, it seems advisable and consistent with good business methods that an auditing committee be appointed to go over accounts at some time during the year. This time should not coincide with the time of the accountant's audit. It is suggested that this committee be appointed by the president.

January 1, 1935.

Gentlemen:

In accordance with the instructions of the Executive Committee, following the provisions in the By-Laws, I have made an examination of the books and records of the Indiana State Medical Association and herewith submit my report of such examination.

The 1934 membership payments were verified from the last card number issued. All recorded receipts were traced to the various depositories and the December 31, 1934, statements of these depositories were reconciled to the balances carried on the various check stubs. Checks issued and invoices covering disbursements were tested and those so test-checked were found to be in order. Bonds owned by the association were examined and found to be in order.

I take this occasion to express my sincere appreciation of the many courtesies extended by the office of the executive secretary during the course of my work.

Respectfully,

W. C. MENDENHALL.

INDIANA STATE MEDICAL ASSOCIATION

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS FOR THE YEARS ENDED DECEMBER 31, 1934, AND 1933, AND COMPARISON

	Year Ended 1934	Year Ended 1933	Increase *-Decrease*
Balance Beginning of Year	$2,625.89	$1,356.37	$1,269.52
CASH RECEIPTS			
Membership Dues	19,141.00	18,850.00	291.00
Postgraduate Study	124.45	86.00	38.45
Income from Exhibits	1,792.50	870.00	922.50
Interest on Bank Balances		37.62	*-37.62*
Interest on United States Government Bonds	215.14	212.50	2.64
Interest on Indianapolis, Indiana, City Hospital Bonds	247.50	247.50	
Interest on Marion County, Indiana, Flood Prevention Bonds	212.50	212.50	
Interest on Ft. Wayne, Indiana, School Improvement Bonds	225.00	225.00	
Interest on Lake County, Indiana, State Highway Aid Bonds	150.00	50.00	100.00
Indiana State Dental Association		2.00	*-2.00*
Refund by the Journal Indiana State Medical Association		32.52	*-32.52*
Journal subscription	2.00		2.00
Total Cash Receipts	$22,110.09	$20,825.64	$1,284.45
Total	$24,735.98	$22,182.01	$2,553.97
CASH DISBURSEMENTS			
Transfers of applicable portion of dues to:			
The Journal of the Indiana State Medical Association	$5,492.00	$5,406.00	$86.00
Medical Defense Fund	2,044.50	217.30	1,827.20
Loan to the Journal		500.00	*-500.00*
Executive Office Expense	8,318.11	8,094.66	223.45
Publicity Committee	431.75	395.98	35.77
Public Policy	187.90	399.76	*-211.86*
Council	123.29	160.98	*-37.69*
Treasurer's Office	311.36	205.68	105.68
Annual Session	1,720.33	1,382.90	337.43
Miscellaneous Committees	582.20	525.54	56.66
Postgraduate Study	211.41	192.32	19.09
Attorney's Fee—Medical Defense		600.00	*-600.00*
Expenditures for Medical Defense prior to creation of fund		1,475.00	*-1,475.00*
Total Cash Disbursements	$19,422.85	$19,556.12	*$-133.27*
Balance End of Year	$5,313.13	$2,625.89	$2,687.24

MEDICAL DEFENSE FUND

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS—JANUARY 1—DECEMBER 31, 1934

Cash on Hand January 1, 1934		$217.30
Add: Cash Received		
From General Fund	$2,040.00	
Check drawn on General Fund but not Deposited	4.50	2,044.50
Total		$2,261.80
Deduct: Cash Disbursements		
Attorney's Salary	$600.00	
Bond Premium	15.00	
Printing Checks	11.25	
Malpractice Fees	800.00	
Federal Tax on Checks	.28	
Total Disbursements		1,426.53
Cash on Hand December 31, 1934		$835.27

INVESTMENTS—DECEMBER 31, 1934

	Maturity	Par Value	Rate
GENERAL FUND			
Ft. Wayne, Indiana, School Improvement	1940	$3,000.00	4½%
Lake County, Indiana, State Highway Aid	1937	2,000.00	5%
Marion County, Indiana, Flood Prevention	1949	3,000.00	4¼%
Indianapolis, Indiana, City Hospital	1950	1,000.00	4%
Indianapolis, Indiana, City Hospital	1951	4,000.00	4%
Total		$13,000.00	
Items on Which Interest Is in Default and Value Is Doubtful:			
Beachton Court Apartments, Chicago, Ill., Certificates of Deposit, 1932	1938	$4,000.00	6%

Rokeby Apartment Hotel, Chicago, Ill., Certificate of Deposit, 1932	1937	1,000.00	6%
Total Deposit Box Contents Representing Investments of the General Fund....		$18,000.00	
MEDICAL DEFENSE FUND			
United States Government Securities	1943–45	$3,000.00	3¼%
United States 4th Liberty Loan	1938	2,000.00	4¼%
Indianapolis, Indiana, City Hospital	1941	1,000.00	4¾%
Ft. Wayne, Indiana, School Improvement	1940	2,000.00	4½%
Marion County, Indiana, Flood Prevention	1949	2,000.00	4¼%
Total Deposit Box Contents Representing Investments of the Medical Defense Fund		$10,000.00	
Total All Investments at Par Value		$28,000.00	

I do hereby certify that the above listed securities of the Indiana State Medical Association were examined by me January 8, 1935, at the Indiana National Bank. All 1934 interest coupons had been properly detached and the interest therefrom reported in the cash receipts of the association.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION SUMMARY OF CASH RECEIPTS AND DISBURSEMENTS FOR THE YEAR ENDED DECEMBER 31, 1934

Balance January 1, 1934		$71.94
Add: Cash Receipts		
Subscriptions	$5,553.00	
Single Copy Sales	19.00	
Electrotypes (paid by authors)	18.59	
Advertising	8,262.40	
Collections on Old Accounts Receivable	670.50	
Total Receipts		14,523.49
Total		$14,595.43
Deduct: Disbursements		
Management and Editorial Expenses	$5,980.00	
Office Expenses	1,390.33	
Printing	4,740.99	
Postage	385.00	
Electrotypes	332.25	
Expenses of Editorial Board	44.67	
Total Disbursements		12,873.24
Balance December 31, 1934		$1,722.19

Respectfully submitted,
A. F. WEYERBACHER, M. D., *Treasurer.*

REPORT OF THE CHAIRMAN OF THE COUNCIL

House of Delegates, Indiana State Medical Association:

Gentlemen:

Only a brief summary of the principal actions taken during the past year by the Council of the Indiana State Medical Association is herewith given as complete and detailed minutes of the meetings of the Council are carried in the November, 1934, and the February, 1935, issues of THE JOURNAL.

First Meeting, Indianapolis, October 9, 1934

The Council convened at the Claypool Hotel, Indianapolis, in the afternoon, with the chairman presiding. The roll call showed eleven councilors, all the officers, members of the Executive Committee, and the executive secretary present. Doctor Harold Camp, secretary of the Illinois State Medical Society, was present as a guest at the meeting.

Indigent Sick Arrangements

Wayne Coy, successor to William Book, the state relief director, discussed the Indiana situation in regard to the care of the indigent sick under FERA regulations No. 7. Mr. Coy's discussion was followed by some comments by Doctor Camp. The chairman asked for suggestions and methods of cooperation with Mr. Coy and the relief officials and said that the Executive Committee would be glad to meet with Mr. Coy any time.

Eight-Hour Day for Nurses

Letter read from the president of the Indiana State Nurses' Association concerning shorter day for nurses. Consideration of this matter at the meeting was tabled by the Council.

Editorial Board Election

Doctor E. M. Shanklin of Hammond was unanimously re-elected editor of THE JOURNAL for 1935, and Doctor Ernest Rupel was unanimously re-elected to membership on the editorial board to serve five years, starting January 1, 1935.

Resignation of Doctor Hare

Doctor John Hare of Evansville presented his resignation to the Council. This resignation was received with a vote of gratitude for Doctor Hare's splendid service while a member of the Council.

Subscriptions to THE JOURNAL *by Medical Students*

Doctor Shanklin made a motion which was approved that upperclassmen of the medical department of Indiana University be allowed to subscribe to THE JOURNAL at the rate of $1.00 per year.

As there was no unfinished business the Council did not hold a second meeting.

Midwinter Meeting, Indianapolis, January 13, 1935

With eleven members of the Council, the president for 1933, the retiring president, incoming president, president-elect, treasurer, editor, and executive secretary of the Association present, the Council convened in the morning.

Reports of Councilors and Officers

Each councilor made a report giving information in regard to the activities in his district society. These reports showed medical organization throughout the state generally in excellent condition.

Reports of officers received.

The First District Medical Society requested that the postgraduate meeting be held once again at Evansville.

Doctor E. E. Padgett, retiring president, expressed appreciation for the co-operation he had received during his term of office.

Doctor W. J. Leach, president 1935, stated that the councilor reports "indicate that the State Association as a whole is going in the right direction and is well equipped for another year's work."

Doctor R. L. Sensenich, president-elect, told of the work being done in regard to the sickness insurance problem, both nationally and in Indiana.

Doctor A. F. Weyerbacher, the treasurer, made a report that showed that the Association had operated with a balance at the end of the year of $2,687.24 above the balance at the end of the preceding year.

Doctor E. M. Shanklin, editor of The Journal, asked that The Journal be budgeted enough funds to allow it to print at least one hundred more reading pages in 1935 than were printed in 1934.

Eight-Hour Day for Nurses

This subject was again tabled by the Council.

1935 Annual Session

A preliminary report, along with the proposals and suggestions for the 1935 annual session at Gary, October 8, 9 and 10, brought before the Council.

Membership Report

The membership report for 1934 showed 2737 members as against 2715 for 1933.

Reports of Guests

Doctor F. S. Crockett, a member of the special legislative committee of the American Medical Association, spoke upon the problem of social insurance.

Doctor Verne K. Harvey, director of the State Division of Public Health, made a detailed report of the activities of the Division since its re-organization.

Albert Stump, attorney for the Association, spoke upon legislative matters.

Doctor W. D. Gatch, dean of the Indiana University School of Medicine, spoke upon the new set-up of the State Division of Public Health.

Doctor O. T. Scamahorn, chairman of the Committee on Legislation and Public Policy, explained the proposed bill to revamp the present health officer law.

Doctor D. O. Kearby, chairman of the Committee on Lye Burns, discussed the work of his committee.

Executive Session

An executive session of the Council was held in the afternoon, at which the new public health officer bill and other legislative matters such as the erection of a new tuberculosis hospital in southern Indiana, gross income tax legislation, the proposed bill which would give a corporation the right to practice medicine in the state, and the Abraham Epstein bill to socialize the practice of medicine, were discussed.

Elections for 1935

Doctor William H. Kennedy and Doctor H. H. Wheeler of Indianapolis were re-elected members of the Executive Committee for 1935. Doctor O. O. Alexander of Terre Haute was re-elected chairman of the Council.

Respectfully submitted,

O. O. Alexander, M. D.,
Chairman of the Council.

First Councilor District

As it has been and is uppermost in the minds of the medical profession, the subject of state medicine has been the principal matter for consideration in the First District. Last fall Dr. A. M. Mitchell, of Terre Haute, attended the Gibson County Society meeting and gave a very excellent talk on the "Socialization of Medicine." In February a joint meeting of representatives from the counties of the First District was held in Evansville and the councilor opened a round table discussion on state medicine. This meeting was well attended and the matter was enthusiastically discussed by those present.

The First District Medical Society again this year entertained the course in postgraduate instruction. This meeting, although not as well attended as last year, was thoroughly enjoyed by those present. This course of instruction might well be eagerly sought by the various districts of the state.

The election of officers of the First District was postponed at the time of the above meeting until a social meeting could be held during the summer at New Harmony under the auspices of the Posey County Medical Society. As yet this social meeting has not been held. Postponement of the meeting was especially due to certain climatic and high water conditions of the Wabash River, but probably it will be called in the near future.

I. C. Barclay, M. D.,
Councilor.

Second Councilor District

The various county medical societies in the Second District have been more active than for several years. It appears that the individual physician is aware of his need of organization.

The county programs have given a greater amount of time to the industrial and economic phases of modern society than in the past.

It is my belief that the physicians of the Second District realize that the social worker and philanthropist are desirous of directing their work and their contact with the public and patient.

Our annual meeting at Vincennes in June was well attended and thoroughly enjoyed.

The various counties in the district have received numerous young men into the profession during the last year. Practically all of such young physicians have aligned with organized medicine.

H. C. WADSWORTH, M. D.,
Councilor.

Third Councilor District

Conditions in the Third District have been very quiet. There have been two meetings held on Medical Economics in addition to the regular spring meeting held at Corydon. The next meeting will be held at Salem, Indiana. It is the object of the District to hold a meeting in those counties in which the societies have been inactive or slow.

H. C. RAGSDALE, M. D., *Councilor.*

Fourth Councilor District

The affairs of the Fourth District in the past year have gone along rather smoothly and there has been very little work for the councilor.

Our annual meeting, held at the Laughery Club House at Rising Sun, was a very successful meeting, although the cloudy weather probably cut our attendance slightly. The scientific session in the afternoon was excellent and enjoyed very much by the members. Greensburg was selected as the place for the meeting next year.

The officers will be:

President—Dr. P. C. Bentle, Greensburg.

Vice-President—Dr. W. H. Stemm, North Vernon.

Secretary-Treasurer — Dr. Charles Overpeck, Greensburg.

Councilor—Dr. Maurice McKain, Columbus.

H. P. GRAESSLE, M. D.,
Councilor.

Fifth Councilor District

The county societies of the Fifth District are all in a flourishing condition and nothing has occurred during the past year which would require any special action on the part of the councilor of this district.

O. O. ALEXANDER, M. D.,
Councilor.

Sixth Councilor District

Every county medical society in this district is functioning as well or better than usual.

The meeting of the District Society held in Rushville on Thursday, May ninth, was well attended and much interest taken in it. There was an interesting program and the papers were generally discussed.

For several years past this Society has had a rule that no one would be allowed on the program for a paper unless he were a member of the Society. Dr. Isom Inlow of Manilla offered a resolution rescinding this rule. It was unanimously adopted. In the future the secretary may ask any one he may choose for papers at our annual meeting.

Dr. Joseph L. Allen of Greenfield was elected president and Dr. Frank Green, Jr., of Rushville was elected secretary and treasurer. These officers are elected for a term of three years.

The next meeting will be held in Shelbyville on Thursday, May fourteenth, 1936.

SAMUEL KENNEDY, M. D., *Councilor.*

Seventh Councilor District

During the past year the Seventh District has been exceedingly quiet. The agitation which prevailed throughout the district and in fact throughout all of the districts of the state with regard to socialized medicine a year ago, has quietly tapered off in this district until very little discussion is now heard of it.

The district meeting was held at Martinsville. A good attendance was present and a very interesting afternoon scientific program was presented. The meeting was held at the Home Lawn Sanitarium and a very enjoyable dinner was given at the conclusion of the afternoon program. The principal speaker of the evening meeting was Mr. James H. Peeling, a faculty member of Butler University, who spoke on "New Frontiers in American Life."

The usual meetings of the various medical societies in the district have been held according to past schedules. In some instances guest speakers were on the programs during the year.

LEONARD A. ENSMINGER, M. D.,
Councilor.

Eighth Councilor District

The Eighth District medical affairs have been very satisfactory. Numerous medical and social meetings have been held in every county, and an excellent spring meeting of the district society was held in Anderson but was not at all well attended. Several outstanding men were brought to the meeting and gave excellent addresses of value to every practitioner, but the attendance was not half what it should have been, and did not justify the expenses incurred. The same conditions prevailed last year at the Muncie meeting, where for the afternoon session only thirty-two men were in attendance, but a large crowd came in for the evening address by Dr. Fishbein.

It is unfortunate that the committees who have the responsibility of these meetings, and have to do so much to make them a success, should not have their efforts rewarded by an adequate attendance.

Special meetings have been held in every county, at which various economic subjects were discussed in efforts to get a better understanding of the trends toward social security as they affect the work of the physician.

M. A. Austin, M. D., *Councilor.*

Ninth Councilor District

Medical affairs moved along on a fairly even keel during the past year, considering the ever-changing, turbulent times.

Unusual interest was displayed in the annual district meeting held in Tipton, May twenty-second, the host being the Tipton County Medical Society. A most wholesome, entertaining, and instructive program was presented, occupying the entire day. The discussions at the scientific session were spirited, and the members were well repaid for their interest. Much applause-credit is due to President Shoup of Sharpsville, Vice-President Cotton of Goldsmith, Secretary-Treasurer Fullerton of Tipton, and also to President Burkhardt of the Tipton Society.

The district delegates accepted the invitation of the Tippecanoe County Medical Society to hold the 1936 meeting in Lafayette.

Floyd T. Romberger, M. D., *Councilor.*

Tenth Councilor District

The Tenth District, composed of Lake, Porter, Jasper and Newton counties, has had a very eventful year. Memberships in its individual societies have been well maintained, and a constant effort is being made by the local secretaries to induce all eligible physicians in the community to join their local society. Delinquencies are few with the realization that individual problems of practice can best be met through cooperative organization.

Regular monthly meetings have been held, with the exception of the summer months, and an excellent degree of interest has been maintained by many unusual and well planned programs. The annual picnic meeting of the Lake County Society, held during the summer, was well attended, and provided an ideal method of drawing the members together on a more friendly and sociable basis.

Perhaps the outstanding event in retrospect was the spring meeting of the Tenth District held at East Chicago in May. A carefully planned scientific program with many notable speakers as guests took up the afternoon. A most appetizing and sustaining dinner was followed by an admirable presentation of the cancer question by Dr. Rosenthal of Michael Reese Hospital, who substituted for Dr. Max Cutler. Unsuspecting the latent talents of the Arrangement Committee and the officers in the matter of extravaganza production, we were then deluged with an eye opener in the form of a presentation of Ziegfeldian possibilities if not Oriental village probabilities. "A good time was had by all."

During the year various lay organizations throughout the district have sent in requests to our Educational Committee for speakers, and these have been capably filled in most instances by local members. The value of this contact cannot be too strongly stressed, and its scope can be advantageously widened by careful preparation of the subject matter, and more interesting presentation.

All of the news bulletins released by the Publicity Committee of the State Association have found favorable space in local papers, and have elicited some comment. With the addition of suitable topics to the library, it is to be hoped that a daily column under the sponsorship of the local society, and with the cooperation of the State Association, will find acceptance in all the papers throughout the state, displacing in large measure the individual health columns now being run.

Regular staff conferences in all of the larger hospitals are held regularly and the internes are given the opportunity to enter into the discussions and presentation of cases.

In general, organized medicine throughout the district has had an active and successful year. Few deaths have occurred among the profession, yet our losses are keenly felt. Malpractice suits have been scarce and official charges of unethical conduct practically absent.

The Tenth District looks forward with enthusiasm to the coming meeting of the State Association at Gary, on October 8th, 9th, and 10th. In 1928 it was our pleasure to entertain the Association, we hope not too unsuccessfully, and this year plans are being made to provide a scientific program of sufficient diversification to appeal to all. The exhibits will be numerous and well worth seeing. The entertainments, you are assured, will entertain. We anticipate the best state meeting since 1928.

N. K. Forster, M. D.,
Councilor.

Eleventh Councilor District

The Eleventh Councilor District has been somewhat out of its usual stride, because of the untimely death of its councilor, Dr. George D. Miller of Logansport. However, all of the seven counties of the district are in fine shape, meetings are being held regularly, and the district has the largest paid-up membership that it has had for many years. The enrollment for the current year (September 13, 1935) is 202.

Dr. Miller's term of office as councilor expires December 31, 1936. Dr. Miller's successor, to complete the term of office, will be selected at the meeting in Peru, October thirtieth.

The next meeting of the Eleventh Indiana Councilor District Medical Association will be held in Peru, Wednesday, October 30, 1935. Dr. Sum-

ner L. Koch of Chicago will present an illustrated address on "Diseases and Surgery of the Hand." A pediatrician will be asked to hold a clinic in the forenoon and present an address in the afternoon. The usual banquet will be held in the evening, under the auspices of the Miami County Medical Society. A cordial invitation is extended to all members of the State Association to attend.

O. G. BRUBAKER, M. D., *Secretary.*

Twelfth Councilor District

The societies of the Twelfth District are in excellent condition. The eight societies report as follows:

The Adams County society meets every second and fourth Friday. All eligible physicians are members. The society had a very good program for the past year.

The Allen County society meets the first and third Tuesday of each month. Programs consisted of many out of town speakers and some local talent, together with meetings with the various hospital staffs at which time clinical cases were discussed. These meetings are popular. The younger and progressive members of this society recently organized The Fort Wayne Academy of Medicine and Surgery. This society has a good beginning.

Dekalb, Lagrange, Noble, and Steuben counties meet jointly as the Northeastern Indiana Academy of Medicine. This is one of the best organizations in this part of the state, meeting the last Thursday of the month.

The Wells and Whitley county societies had full programs for the year. Their secretaries are very active and arranged for good speakers.

Dr. Lyman T. Rawles addressed all organizations in this district on Medical Relief for the Indigent. This was a very timely topic and brought some action from the different societies.

E. M. VANBUSKIRK, M. D., *Councilor.*

Thirteenth Councilor District

During the past year the county societies of the Thirteenth District have done unusually good work in the way of medical programs, and also in the interest that has been taken in the business side of the medical profession, such as legislative matters and care of the indigent.

Many members are taking a more active interest in their county society, knowing that it is the one active unit of medicine in their vicinity.

At this time, arrangements are being made for the annual meeting of the Thirteenth District at Rochester on November sixth. The local society is making a great effort to put on a strong morning clinic and the committee is planning a very interesting and practical program for the afternoon and evening. We are hoping for a large attendance.

W. B. CHRISTOPHEL, M. D., *Councilor.*

REPORT OF EXECUTIVE COMMITTEE

House of Delegates and Council, Indiana State Medical Association:

Gentlemen:

I. Administrative and Executive Activities.

1. *Membership.* Perhaps the most indicative factor which fills your officers with confidence and makes them feel that the future of the medical profession in Indiana is safe is the increase in membership in the Indiana State Medical Association in comparison to this time last year. The membership records for the past three years as of September 1 follow:

Number of members September 1, 1933....2575
Number of members September 1, 1934....2643
Number of members September 1, 1935....2715

The significance of these figures is apparent when it is realized that the total number of physicians in Indiana is constantly dropping and that no special drive for members has ever been made by the State Medical Association. The total number of physicians in Indiana, according to the last three directories of the American Medical Association, follows:

1929	4,102
1931	4,073
1935	4,049

2. *Battle against Sickness Insurance.*

(1) With Doctor F. S. Crockett of Lafayette, a past president of the State Association, and Doctor R. L. Sensenich, of South Bend, president-elect of the State Association, as members of the Committee on Legislative Activities of the American Medical Association, the Indiana State Medical Association has been in a fortunate position in being able to keep in constant touch with the campaign conducted by the American Medical Association against indiscriminate and untried methods of sickness insurance, and without being overly puffed up, your Committee can say truly that the Indiana State Medical Association has led the way in many methods of procedure which later were adopted and used by medical organizations throughout the nation in this battle against the socialization of medicine. It was in Indiana that the contact plan put forward by Doctor Sensensich and the Indiana delegates and adopted at the Cleveland meeting of the American Medical Association in 1934 was first used on a large scale. Each district and county society was asked to appoint contact committees to carry on this work and in addition every member of the Indiana State Medical Association was sent a communication

by the Executive Committee, impressing each physician with the seriousness of this battle.

(2) *Contact with Milbank Foundation.* The contact which was made with Albert Milbank, head of the Milbank Foundation, which is leading to a better understanding between the Foundation and the medical profession, was one of the outstanding contributions of the Indiana State Medical Association during the year. Mr. Milbank was invited as a guest of honor to the annual secretaries' conference in January, and contact has been maintained with him since that conference. It is to be noted that Mr. Milbank stated that the Foundation desired to work in complete cooperation and harmony with the medical profession. In this respect your Committee believes that a step in obtaining this cooperation was made in the recent resignation of John Kingsbury, the author of "Red Medicine" and one of the leading advocates in this country of sickness insurance.

(3) *Change in attitude of the American College of Surgeons.* Shortly before the American Medical Association held its annual meeting at Cleveland in the spring of 1934 the board of regents of the American College of Surgeons publicly advocated sickness insurance in principle. The majority of the members of the College of Surgeons in Indiana immediately sent a signed protest to the officers of the College, stating that the Indiana physicians who are members of the College felt that the College had overstepped itself in dealing with this subject which should be left up to the American Medical Association as representing the entire profession of the country. The Indiana protest in part follows:

> "The members of the College of Surgeons are members of the American Medical Association, and, as such, should be and must be governed by that body in all matters pertaining to ethics and economics. . . . We respectfully ask that the American College of Surgeons confine its efforts to the advancement of surgery and the science of surgery, leaving the subject of ethics, economics, and all allied questions to the American Medical Association to which body they rightfully belong."

Since that time the official attitude of the College of Surgeons has been modified and the College has recognized that it is primarily the right of the American Medical Association to deal with such broad questions of medical economics. The College recently has issued a statement which makes it clear that it does not advocate sickness insurance or the socialization of medicine.

(4) *Message to President Roosevelt.* At the annual meeting of the State Association last year in Indianapolis a telegram was sent to President Roosevelt, informing him of the large amount of material upon the subject of sickness insurance in the hands of the Bureau of Medical Economics of the American Medical Association and requesting that he call upon the American Medical Association for its data upon this subject. Acknowledgment of the message was received from the White House and subsequently Doctor R. G. Leland and others were appointed advisory members of the subcommittee on medicine and health of the President's Committee on Social Security. It is noted with satisfaction that at no time has the President indicated that he favored setting up a system of sickness insurance which would lead to the socialization of medicine.

(5) *The medical undergraduate and the newly licensed physician and socialized medicine.* Realizing that the medical undergraduate and the newly licensed physician would be approached in regard to their ideas upon the socialization of medicine and sickness insurance, your Committee has sent communciations to these men in regard to this subject and it recommends that every county medical society make special efforts to enlist these younger men as members as soon as they enter practice and are eligible to membership, as it is most important that these men be informed as to the viewpoint of organized medicine upon this subject.

(6) *Medical services for underprivileged.* In more than two hundred cities plans are in operation in cooperation with the local county medical societies to take care of persons who can pay something for medical services but not the entire fee. These plans have been investigated and are thoroughly covered in reports of the Committee on Medical Economics of the American Medical Association, and the reports of this Committee should be studied in detail by any society which contemplates the establishment of such a plan. In Indianapolis the Medical and Dental Service Bureau has been established and reports indicate that it is meeting with success. The Committee hopes any society that undertakes a plan will confer with the headquarters office and the American Medical Association before making complete and final arrangements for rendering services under such a plan. The principles for establishing such plans have been set out time and again by the American Medical Association and of course these principles should be adhered to by any group in this state undertaking this work.

(7) *High school debates on sickness insurance and the socialization of medicine.* Having failed to sell the public upon sickness insurance as a result of the elaborate study of the Committee on the Costs of Medical Care, and having failed in their efforts to create a sentiment for sickness insurance schemes by federal or state legislation, the advocates of sickness insurance have now turned their attention to spreading propaganda and creating sentiment through a series of high school debates upon this subject. Throughout Indiana and the nation during the coming winter

debating teams will discuss the subject of sickness insurance and the socialization of medicine. The American Medical Association has prepared a debaters' manual, giving the viewpoint of the medical profession regarding the establishment of sickness insurance in this country. Your Committee urges each county medical society to have a committee appointed which will see that authenticated information and facts upon this subject are made available to high school students taking part in these debates. A great deal of material may be obtained by any student from the American Medical Association.

3. *Care of the Indigent Sick.* One of the tremendous problems during the past year has been the care of the indigent sick and the complications which have arisen, some necessarily due to the fact that the government is disbursing to the medical profession a considerable amount of money each month for services rendered the indigent sick. The question of fees, the question of overlapping authority of the social service worker in medical cases, the question of township politics and, unfortunately but frankly, the question of a few selfish doctors who put in dishonest and exorbitant claims, all have arisen to make the general problem most difficult and, in some localities, the set-up absolutely unsatisfactory. In order to smooth out misunderstandings and eliminate injustices, Mr. Charles B. Marshall, director of finance of the Governor's Commission on Unemployment Relief, was appointed by Wayne Coy as "special trouble shooter" in medical relief cases. As such he has visited many county societies throughout the state and he has held many conferences, formal and informal, with the members of the Executive Committee of the State Association. In the August issue of THE JOURNAL appeared an article prepared by Mr. Marshall, giving a detailed explanation of the new forms and new methods of procedure which in his opinion "would be safeguards to the individual doctor and the public in indigent sick cases."

Your Committee desires in every way possible to cooperate with the Governor's Commission on Unemployment Relief insofar as it can do so and at the same time maintain the basic principles of traditional medical practice—the physician-patient relationship, and the conviction that the medical profession should be paid at least a fee which would allow the individual physicians to break even in rendering services to the indigent sick. Despite the money that has been spent by the state and federal governments for the care of the indigent sick, thousands and thousands of dollars worth of medical services are given away each year without any hope of compensation by members of the medical profession of Indiana.

Your Committee has the following recommendations to make in regard to the continuation of services to the indigent sick in Indiana:

(1) Each county medical society should appoint a medical service committee in accordance with the recommendation contained in the article written by Mr. Marshall and carried in the August JOURNAL.

(2) Each county medical society which has not yet done so should hold a meeting at which Mr. Marshall should be invited to answer questions and discuss complaints and misunderstandings.

(3) Each county medical society should use all its influence to discredit any physician who renders a dishonest statement.

(4) Contracts with groups of individuals should be done away with and the arrangements made with the county medical societies in order that each patient is allowed to choose his own physician and is not forced to leave his own doctor and go to someone who has a contract with the township trustee.

4. *Transient Indigent Service.* Following a year or so marked by conflict between the transient indigent service and the medical organization in Indiana, the situation has been somewhat cleared up by the appointment of a physician to take charge of medical relations in connection with that service. A letter which gives the typical viewpoint of the profession regarding the situation follows:

> "It is no personal quarrel of mine with the Transient Bureau that leads me to resist the signing of a contract agreement here in ———, for certainly they have been very nice to deal with, but I do feel that the principle involved so far as the medical profession at large is concerned is important and inasmuch as this problem of providing medical and other services for large numbers of indigent persons will unquestionably be with us for some years to come, I feel that no settlement should be accepted by the profession that would not be satisfactory on a more or less permanent basis."

5. *Group Insurance Companies and Mutual Benefit Associations.* Previous to the enactment of the insurance code at the last session of the legislature, mutual benefit associations and group insurance organizations, incorporated in the state of Indiana as non-profit organizations and not under the insurance laws of the state, which offered to pay hospital, medical, nursing and funeral services for as low as $1.00 a month, sprung up like mushrooms throughout Indiana. These companies ostensibly allowed the patient the choice of his own physician and the choice of his own hospital. The law could not be made retroactive and so those companies which already were in business continue to function as non-profit, mutual benefit corporations, but all such new companies must be organized under the insurance code and the old companies hereafter come under the provisions of the insurance code.

6. *Appointment of Special Liaison Committee.* As the Social Security Act carries provision for the expenditure of a considerable sum of money by the federal government here in Indiana, the Indiana State Medical Association as such is vitally interested in the policies and the program which are to be followed in the disbursing of these funds. The expenditure of such money is to rest entirely with the State Board and the State Division of Public Health, under the direction of Verne K. Harvey, M. D., state director of public health. At the request of Doctor Harvey the Indiana State Medical Association appointed two representatives to act with two representatives of the Indiana University School of Medicine on a committee with which Doctor Harvey may consult in regard to this work and the expenditure of these funds here in Indiana. These appointments are:

For Indiana State Medical Association:

J. C. Carter, M. D., Indianapolis, pediatrics
E. O. Asher, M. D., New Augusta, obstetrics

For Indiana University School of Medicine:

Matthew Winters, M. D., Indianapolis
H. F. Beckman, M. D., Indianapolis

At a conference of state health directors held during the summer at Washington, the Indiana plan of health education was highly praised and it was recommended that any funds expended by the State Division of Public Health should be in accord with the policies laid down in the Indiana plan whereby each local county medical society is made responsible for the health education and health program of its own county.

7. *Approval of Cancer Prevention Program of Indiana Federation of Clubs.* Hearty support of the Indiana State Medical Association was given to the Indiana Federation of Clubs in its cancer education program. The American Federation has adopted the prevention and control of cancer as a principal objective of the Federation and is planning a statewide educational program in order to give the public the newer knowledge of cancer, to enlist public support and cooperation to lessen the number of cases of deaths from cancer, and to create public opinion which would help the medical profession to provide the necessary teaching, diagnostic and hospital facilities for the control of cancer. The Federation states that "It is essential that such a program have the full confidence, approval and support of the medical profession. The Federation will present the plan of the proposed program and of activities in connection with the program to the designated representatives of the State Medical Association for approval and will work in close cooperation with the Association."

8. *Recognition of National Board Examinations.* For a number of years considerable agitation has marked debates in the House of Delegates of the Indiana State Medical Association in regard to recognition of examinations of the National Board by the Indiana State Board of Medical Registration and Examination. Heretofore the Indiana Board has made students qualify in the Indiana examinations regardless of the fact that they had taken the National Board examination. Indiana was one of the few states where this practice was in vogue. Upon a request for an official ruling in regard to this by the State Board of Medical Registration and Examination, the attorney-general gave the official opinion that the State Board of Medical Registration and Examination may recognize candidates who have taken the National Board examination. This opinion of the attorney-general obviates any necessity for legislation in regard to this matter.

9. *Registration Fee at Annual Session.* The Committee has ruled that any physician residing in Indiana who is in active practice and is not a member of the Association shall pay a registration fee of $5.00 for the annual convention and that guards shall be placed at the doors to see that no one is admitted to the assembly rooms without the proper badge. Ineligibles, of course, cannot register under any circumstances.

II. The Journal.

1. It is with satisfaction that we, as the Committee in charge of the business management of THE JOURNAL, report that this publication is in splendid condition and that in all respects THE JOURNAL is considered one of the outstanding state medical publications in the country. The number of pages in THE JOURNAL this year has been increased by 68 pages so far over last year.

The total number of pages in THE JOURNAL from January through September, 1935, follows:

Reading pages 474
Advertising pages 318

2. *Advertising.* The Executive Committee and Editorial Board have held strictly to the rules and regulations of the Council on Pharmacy and Chemistry of the American Medical Association in its acceptance of advertising. The Committee is ever careful of the type of advertising it accepts, whether it be medical or non-medical, and it urges all readers of THE JOURNAL to support the advertisers.

3. *Library.* A considerable library of medical books is being built up at the headquarters office with the books which are received from publishers for review by THE JOURNAL. These books are for the use of the medical profession of Indiana and may be borrowed with expense of postage only. All members of the Association are urged to make use of them. Books received are listed in THE JOURNAL each month.

4. *Make-Up.* THE JOURNAL has undergone some changes in its make-up, notably the elimination of advertising from its front page.

5. *Copies of* JOURNAL *to prospective members.* Feeling that THE JOURNAL reflects the policies and the progress of activities of the State Association more adequately perhaps than any separate printed pamphlet, the Executive Committee authorized the sending of THE JOURNAL complimentarily for three months, along with a letter which pointed out the advantages of affiliating with the State Medical Association, to ninety-two physicians who have been reported by local county society secretaries as eligible to membership in the State Association but have not joined their local county medical society. The entire plan was explained to the secretaries of the county medical societies and each secretary sent in the list of physicians in his county whose interest in medical organization might be aroused through THE JOURNAL.

III. Medical Defense Activities.

1. For the second year in succession the medical defense cases actually filed against physicians decreased during the twelve month period just passed. A year ago at the time of this report, September 1, 1934, the following sixteen cases were pending before the Committee, three of which have been closed, and the Committee reports the following progress on these sixteen cases:

Case No. 129—Case pending. No new developments.

Case No. 151—Suit filed July, 1927. Husband of plaintiff died and apparently action has been dropped. Expense, $100.00, paid August 25, 1932.

Case No. 156—Suit filed March 27, 1928. Case pending. Verdict for plaintiff after six days' trial in 1933; case to be appealed. Expense, $66.28, paid September 23, 1929; $350.00, paid June 30, 1933.

Case No. 162—Case still pending. Tried in 1928 and postponed. No further developments.

Case No. 170—Suit filed June 2, 1930. Pending.

Case No. 172—Suit filed April 9, 1930. Pending.

Case No. 176—Suit filed March 28, 1931. Still pending.

Case No. 181—Suit filed September 8, 1931. Pending.

Case No. 184—Suit filed October 13, 1931. Case dismissed October 17, 1934. Expense, $150.00, paid November 26, 1934.

Case No. 187—Suit filed February 13, 1932. Three days' trial; jury disagreed; new trial ordered. Expense, $250.00, paid on February 20, 1934.

Case No. 194—Suit filed July 9, 1932. Pending.

Case No. 197—Suit filed December 30, 1932. Pending.

Case No. 198—Suit filed May, 1933. Case closed May 30, 1935, when attorneys failed to appear after they had offered to settle for $100.00. Attorney's fee paid by commercial company.

Case No. 199—Suit filed August 1, 1933. Case dismissed by plaintiff and closed June 4, 1935. Expense, $100.00, paid June 4, 1935.

Case No. 200—Suit filed February 12, 1932. Pending.

Case No. 201—Suit filed originally on December 11, 1933, and refiled June 11, 1934. Action pending.

Since September 1, 1934, and up to September 1, 1935, the following eight new cases have come before the Committee, two of which have been closed, leaving a total of nineteen cases pending at the present time, as against sixteen unclosed cases at the same time last year:

Case No. 202—Suit filed August, 1934. Pending.

Case No. 203—Suit filed August 22, 1934. Pending.

Case No. 204—Suit filed December 4, 1934. Pending.

Case No. 205—Suit filed 1934. Pending.

Case No. 206—Case dismissed by the court. Expense, $100.00, paid December 13, 1934.

Case No. 207—Suit filed November 28, 1934. Dismissed February 15, 1935. Expense, $100.00, paid March 15, 1935.

Case No. 208—Suit filed January 10, 1935. Pending.

Case No. 209—Suit filed March 1, 1935. Pending.

The total cost for medical defense from September 1, 1934, to September 1, 1935, was $450.00. The preceding year the expense was $550.00 and the year before that it was $1,825.00.

2. *Medical Defense Fund Statement, from September 1, 1934, to September 1, 1935:*

Balance, September 1, 1934...		$1,217.85
Deposits:		
Dues, 97—1934 members @ 75c		72.75
Dues, 2673—1935 members @ 75c		2,004.75
		$3,295.35
Disbursements:		
Malpractice fees	$450.00	
Salary of Association attorney	600.00	
Treasurer's bond	15.00	
Government tax on checks...	.14	1,065.14
Balance in checking account September 1, 1935.....		$2,230.21

IV. Conclusion.

Finally your Executive Committee wishes to express its confidence in the present and its hope for the future, provided the profession works and acts with unity in matters of broad social and medical-economic importance. Coordinated efforts on the part of the members of the profession through their local county medical societies and the State and American Medical Association have done much to allay the fears of state medicine control.

Things look much better now than they did a year ago, but the battle is not yet won, and the various groups which desire a socialized system of practice in some form still have powerful forces in the field. Therefore, in closing, your committee urges each member of the profession to do his part to maintain county societies which function with energy, intelligence, and foresight.

Respectfully submitted,

W. H. Kennedy, M. D., Chairman.
H. H. Wheeler, M. D.
W. J. Leach, M. D.
R. L. Sensenich, M. D.
O. O. Alexander, M. D.

REPORT OF COMMITTEE ON LEGISLATION AND PUBLIC POLICY

House of Delegates, Indiana State Medical Association:

Gentlemen:

Seldom if ever in the history of medicine has the profession gone through a more strenuous period from a legislative standpoint than in the past year, and it is with a feeling of downright pleasure, not to mention relief, that your Committee on Legislation is able to report that although all perhaps is not perfect along the Wabash, at least all is fairly quiet and under control.

When Congress and the session of the General Assembly opened this last winter the profession faced two distinct legislative threats—cult legislation and measures to socialize the practice of medicine. Other measures such as full-time health officer bills, indigent sick regulations, sterilization legislation, amendments to the state narcotic laws, and the medical provisions of various social security measures were of intense importance but these were all overshadowed in this state by the apprehension that bills advocating some form of socialized medicine would be introduced. To the satisfaction of your committee and the profession, despite loud ballyhoo, much talk, publicity and warnings, particularly in regard to the Abraham Epstein measure, no bills advocating federal or state medical control were introduced in Congress or in the General Assembly, and no movement was apparent in this state toward that end. Although introduced, cult legislation was overwhelmingly defeated in both branches of the legislature.

So much has been written in *The Journal of the American Medical Association* concerning questions of national legislation of particular interest to the profession and in the state Journal concerning the details of the local situation that your committee at this time merely refers you to its complete report of the measures specially affecting the profession passed during the last session of the legislature which is contained in the April issue of the state Journal, pages 198, 199, 204 and 205.

Under the set-up of the Indiana organization the Legislative Committee's prime activity and function comes during the session of the state legislature, and at that time county societies are kept informed as to the status of legislative matters by bulletins issued weekly or, in times of stress, daily, by the Legislative Committee. Once a bill is passed, or once Congress adopts a measure and it becomes a law, the matter passes into the hands of the Executive Committee or some other special committee or bureau of the Association for detailed consideration and action. Thus, by reading the Executive Committee report you will find statements as to the present status as far as medicine is concerned of the Social Security Act, the new WPA proposals and the U. S. Compensation Commission rules in regard to fees, FERA and the care of the indigent sick, transient indigent care, and other important governmental measures. Further consideration of these matters as they pertain to the Indiana profession undoubtedly will come before the House of Delegates at the Gary session, and your Legislative Committee is confident that the Indiana State Medical Association is organized so effectively for legislative action that it can act decisively and expeditiously on any matter referred to it by the House.

At the risk of being tiresome your committee here once again reiterates the statement that *legislative battles are not won or lost after the representatives get to Indianapolis but back home in the primaries and through personal contacts and interviews by the home folks with their representatives.* For example, your committee can harangue most learnedly and informatively all day and all night to a legislator upon the dangers of socialized medicine but nine times out of ten it won't have half the effect upon that legislator's vote as would a word from Doctor Smith or Doctor Jones whom he has known all his life back home. Hence your committee takes the opportunity now to thank all the Doctor Joneses and Smiths back home for their fine help and cooperation whenever we have sent a hurried call upon you for aid. We can deliver for you only so long as we can count on that enthusiastic help and wholehearted cooperation.

Your committee cannot submit this report without a word of appreciation for the splendid work of the doctors and our many friends who served

in the legislature and a special word at this time in regard to the loss of Doctor George Miller, who served as senator from Cass County during the last two sessions of the legislature. His good sense and judgment won many friends among his colleagues in the Senate to the medical cause and his professional training and experience made him a man who will be greatly missed. We hope that some other physician may step forth to represent the profession in the Senate as loyally and faithfully as did Doctor Miller.

Respectfully submitted,

O. T. SCAMAHORN, M. D., Chairman.
GEORGE DANIELS, M. D.
F. H. JETT, M. D.
L. E. FRITSCH, M. D.
JOHN A. ASPY, M. D.
JOHN C. GLACKMAN, M. D.
GEORGE DILLINGER, M. D.

REPORT OF THE EDITOR OF THE JOURNAL

We are pleased to report that, so far as we have been able to ascertain, THE JOURNAL has had a very successful year. The financial report published in this issue is self-explanatory. Some changes in format have been made (principally the removal of advertising from the front cover page) which we believe have added to the appearance of the magazine. The number of printed pages has been increased over last year.

We believe we are correct when we say that there has been a marked improvement in the papers published. At least, numerous comments received during the past year have indicated that opinion.

Editorially, our innate modesty prevents much comment, except to repeat that we have endeavored to reflect Indiana medical opinion rather than personal observations. While it probably is true that in the matter of political discussions the present affords greater opportunities for such comment than at any time in our memories, we have carefully refrained from talking about such matters as much as possible. We trust that we have pleased the several members who wrote to us, asking that we "hedge" a bit on the subject of alcohol. It seems that these members had not approved the editorial stand of former years.

Members have been most generous in sending to us comments concerning THE JOURNAL. Many helpful criticisms have been received. We hope that members will feel free to offer constructive criticism at any time.

Mechanically, some minor changes have been made in the format, all improvements, we believe. The number of printed pages has been increased from 724 through September, 1934, to 792 through September, 1935, an increase of 68. It is planned to add 100 printed pages to this year's volume.

We wish to acknowledge the fine support that we have had from the official family, from the Editorial Board members, and from the general membership. Nor do we forget the invaluable assistance rendered by the headquarters staff.

We trust that THE JOURNAL will continue to merit your approval, and wish again to announce that we solicit your comment and your criticism.

E. M. SHANKLIN, M. D., *Editor.*

REPORT OF THE BUREAU OF PUBLICITY

House of Delegates, Indiana State Medical Association

Gentlemen:

I. Historical Work of the Bureau.

(1) Under the direction of the Bureau, Doctor L. G. Zerfas, historian for the Association, gathered together pictures of the past presidents of the Association. Following an exhibit of these pictures in the scientific exhibit during the annual session at Indianapolis last October, these photographs were hung in the committee room of the state headquarters office. The picture of every past president has now been obtained. It is with pleasure that the Bureau notes the interest which visitors to the headquarters office take in this collection. Several state societies, among them being Colorado, Kansas, and Missouri, have made detailed inquiry into the method used in collecting these pictures with a view of undertaking the same thing in their own states.

(2) *Historical articles in* THE JOURNAL. Starting last January, monthly historical articles have been an outstanding feature in each issue of *The Journal of the Indiana State Medical Association.* These articles have been prepared by Doctor Zerfas, who has received a vast amount of historical information from many sources. Upon behalf of the historian of the Association, the Bureau wishes that all those who are sufficiently interested in this matter would forward material to Doctor Zerfas or to the Bureau. Many county medical societies have appointed their own historian, and the Bureau urges all county medical societies who have not done so to appoint a historian and to prepare a medical history of each county.

(3) Historical meetings have been held by several county and district societies. Perhaps the most notable among these was the meeting of the Third District Medical Society at Corydon, Indiana, which was held as a memorial for several pioneer Indiana physicians, among them being Asahel Clapp, M. D. (1792 to 1862), who was the president of the first medical organization in Indiana and the third president of the present Indiana State Medical Association, serving in the year 1851.

(4) The Bureau compliments the Indiana University School of Medicine upon the establishment of a medical museum and assures the University of its wholehearted cooperation in obtaining relics for this museum.

(5) The Bureau of Publicity urges as a definite project of the auxiliary to the Indiana State Medical Association a pilgrimage to the graves of the following persons who were pioneers in scientific medical progress:

a. Mrs. Jane Todd Crawford, who is buried near Sullivan, Indiana. In 1809 Doctor Ephriam McDowell performed the first operation in the world for ovarian tumor upon her.
b. Jonathan Richmond, M. D., buried at Covington, Indiana, who did the first caesarean section west of the Alleghany Mountains.
c. John Stowe Bobbs, M. D., buried at Crown Hill, Indianapolis, who performed the first gall stone operation in the world.
d. Mrs. Z. (Mary E.) Burnsworth, Doctor J. S. Bobbs' patient, who is buried at McCordsville, Indiana.

II. Medical Pioneer Memorial Committee.

On many previous occasions the Bureau has suggested that the Indiana profession pay fitting tribute to the pioneers mentioned above. The State of Kentucky this year paid fitting tribute to Doctor McDowell's accomplishments and Mrs. Crawford's heroism and the Bureau of Publicity feels that Indiana also should memorialize the heroism of Mrs. Crawford who is buried on Indiana soil.

In order that such official recognition may be forthcoming in the near future, the Bureau recommends that the House of Delegates instruct the President of the Indiana State Medical Association to appoint a committee to work with a like committee to be appointed by the Woman's Auxiliary to formulate a program and plans for such a memorial tribute to Mrs. Crawford, Doctor Richmond, Doctor Bobbs and Mrs. Burnsworth.

III. Comments on the Principles of Medical Ethics.

(1) *Personal puffery.* The Bureau of Publicity subscribes to a clipping service and through this service receives clippings of articles which have to do with physicians and the practice of medicine in the state of Indiana. The Bureau has noticed that the number of articles of a questionable ethical nature which appear in the Indiana press seem to be increasing rather than decreasing. The Bureau takes this occasion to express its opinion that the use of the names of individual physicians in private practice in many of these articles is not in harmony with the attitude often expressed in rules in the House of Delegates of the American Medical Association and of the Indiana State Medical Association against "personal puffery." Such instances as a picture of a physician with the statement, "Young Doctor Invents New Surgical Instrument," or of a physician who has opened an office and receives the following heading in the paper, "New Doctor Wins Prompt Popularity," are only typical of unethical and distasteful publicity. The Bureau warns the physicians of the state that it is a matter of good taste to avoid rather than to encourage personal puffery in the newspapers. From the beginning the Bureau has attempted to transmit to the public scientific facts and a rational interpretation of them and in so doing to submerge emphasis on the individual presenting the data. From its inception effort has been made by the Bureau to restrict and as far as possible obliterate "personal puffery."

Scientific articles approved by the Bureau are published impersonally. Individual publicity can be obtained only through medical societies and authorized medical journals, and not through the newspapers. Quacks depend upon the newspapers.

(2) *Radio broadcasting rules.* The question of the use of physicians' names in radio broadcasting has been brought up before the Bureau so many times during the past year that the Bureau at this time takes occasion to re-state its ruling concerning radio broadcasts, a rule which on several occasions has been approved by the House of Delegates:

> The Bureau has adopted a rule that no physician who is in private practice should have his name mentioned over the radio in connection with the Bureau of Publicity broadcasts, *but* the names of physicians holding public office and connected with public institutions may be mentioned over the radio, *if they are not in private practice.*

This is the amended form which has been adopted to clarify any question about the names of physicians in private practice being used in broadcasts.

During the year the Bureau sent a questionnaire to the secretaries of the various state medical societies asking them for information concerning special rules and regulations that these societies have concerning radio publicity. Accompanying this questionnaire was a copy of the rules of the Bureau for speakers talking before lay audiences and also the rule of the Bureau concerning radio broadcasting. Answers were received from several state societies complimenting the Bureau upon its ruling.

(3) *Rules for speakers addressing lay audiences.* The following rules have been adopted by the Bureau of Publicity to guide speakers who make talks before lay audiences:

1. The use of scientific terms should be avoided when speaking to a lay audience.
2. Do not talk over 30 minutes, unless urged to do so.
3. Please keep closely to your subject.
4. Put pep into your talk and speak loud enough for all to hear.
5. Speakers should arrive at least a few moments before the hour announced.
6. It is suggested that speakers endeavor to present the composite view of the profession in their addresses to the public.

7. It is advisable to avoid citation of personal case reports.
8. Please aid the Bureau of Publicity in its efforts to make all presentation of its work as impersonal as possible.

IV. Report on Resolutions Passed by the House of Delegates at 1934 Meeting.

(1) *Tuberculosis campaign.* The following resolution was prepared by the Bureau of Publicity and passed by the House of Delegates of the Indiana State Medical Association at the Indianapolis session last October:

> "As the Advisory Health Council of the State of Indiana has approved a tuberculosis campaign to be presented to the Indiana State Medical Association for its consideration; therefore, be it
>
> "*Resolved*, That a tuberculosis campaign for the State of Indiana be approved by the House of Delegates, to be conducted through cooperation with the district and county medical societies and the State Division of Public Health, and the Advisory Health Council of the same, and through physicians in the state who are particularly interested in tuberculosis problems."

The Bureau is of the opinion that an active program for such a campaign should be followed out this coming year.

Following the action of the House of Delegates approving the campaign the Bureau of Publicity appointed a subcommittee to formulate a plan as provided for in the foregoing resolution. A summary of the report of this subcommittee follows:

The subcommittee held meetings with representatives of various organizations and interested individuals, among these organizations being the Indianapolis City Board of Health, the Indianapolis City School Board, the Marion County Tuberculosis Association, and the Indianapolis X-Ray Society. As a result of these meetings the subcommittee was convinced of the benefit of a tuberculosis survey, properly conducted, and it advised the Publicity Bureau to recommend this project to the Indianapolis Medical Society for consideration.

The subcommittee recommended that the survey be conducted under the direction of the Indianapolis Medical Society in cooperation with the City Board of Health, the public schools, and the Marion County Tuberculosis Association. The survey was to consist of two parts:

(1) *Educational*—talks before medical society and the laity, principally parent-teacher groups and high school children.

(2) *Case-finding*—routine tuberculin test of all high school children, intra-dermal or Mantoux test recommended with x-ray test for all positive reactors. Consent of parents was to be obtained.

The subcommittee further recommended that one high school should be singled out for a beginning survey. In conclusion, the subcommittee stated, "Such a survey will go far toward lessening tuberculosis and will therefore be of great public benefit. This will place the physician on a higher plane in the eyes of the public. It will also bring patients in need of their services to the offices of physicians. In this survey the family physician would be expected to care for his own patients and at his customary fee. Indigents could be referred to the tuberculosis dispensary."

The Bureau of Publicity gave its approval to this splendid report with the proviso that in its opinion the question of x-ray examinations needs to be very carefully and conservatively undertaken.

In connection with this campaign the following resolutions were passed by the Indiana Roentgen Society on February 22, 1935:

1. That such a survey will necessitate the examination of thousands of children with mass production methods rather than the more scientific examination made by competent physicians and qualified roentgenologists.

2. A negative x-ray examination may be followed in three months by a positive one. These surveys therefore have a questionable value unless repeated at frequent intervals in that they create a sense of false security in the mind of the parent or guardian and occasionally a loss of valuable time while the disease remains unrecognized and unsuspected.

3. We believe a more valuable procedure to be the presentation by each school child of a health certificate from the family physician at the beginning of the school year. We recommend that after a positive Mantoux test, a proper clinical examination and history taking, arrangements should be made in local districts to have the children examined according to the facilities available, the fees charged to be based upon the social status of the child and borne by the parents.

4. That the Indiana Roentgen Society disapproves of such short cuts taken in surveys, or the use of paper which is 60 per cent less efficient as compared with transparent films, and the single film examination.

5. That in conclusion: We feel that general surveys are in their nature mass production and therefore inefficient and create a sense of false security, and tend toward socialized medicine.

(2) *Traffic accidents.* The following resolution concerning the increase in traffic accidents was presented to the House of Delegates by the Bureau and passed at the Indianapolis session last October:

"*Whereas*, Organized medicine in keeping with its traditional solicitude for the public health in the field of preventive medicine, and

"*Whereas*, The mounting toll of traffic accidents resulting in an appalling record of deaths and serious injuries, a considerable number of which are caused by well-known traffic hazards which have been allowed to remain in our public highways and streets; therefore, be it

"*Resolved*, That the Indiana State Medical Association, through its House of Delegates, acutely conscious of its responsibility in the field of preventive medicine, initiate an active cooperation with other safety agencies for the elimination of all unwarrantable traffic hazards, and be it further

"*Resolved*, That a committee be appointed to formulate practical plans for the participation of the State Association in a movement to reduce the menace to life and health in traffic accidents."

As a result a committee on traffic accidents was appointed.

V. Battle Against the Socialization of Medicine.

(1) "*Not in Indiana.*" In accord with its policy since its formation the Bureau has actively opposed all projects which would tend toward the socialization of medicine. The Bureau prepared for release to the public press an article entitled, "Not in Indiana," which opposed the socialization of medicine or a form of compulsory sickness insurance in this country. This article was widely copied and received many editorial comments in the papers throughout the state and nation.

(2) "*Doctors, Dollars and Disease.*" The Bureau unequivocally expressed its opposition to the radio broadcasts entitled, "Doctors, Dollars and Disease," as most of these broadcasts advocated some plan of sickness insurance and the Bureau feels that any form of sickness insurance eventually will lead to the socialization of medicine and will not be in the interest of the public welfare and the advancement of scientific medicine.

VI. Annual Congress on Medical Education, Hospitals and Licensure.

As has been customary, the Bureau of Publicity sent a representative to the thirty-first annual Congress on Medical Education, Hospitals and Licensure, which was held in Chicago on February 18 and 19, 1935. The report of this representative was published in the April number of THE JOURNAL.

VII. Extension of the Services of the Bureau of Publicity

During the past year the services of the Bureau of Publicity have been somewhat extended. Various state and local societies, among them being the Kansas and Ohio State Medical Societies, have requested of the Bureau detailed information as to its functions, activities, and method of procedure. At their own request the names of many groups have been added to the Bureau's mailing list to receive the news releases of the Bureau. The Bureau has worked in close cooperation with the following organizations during the year:

Indiana Hospital Association.
Indiana State Nurses' Association.
Indiana Methodist Hospital Association.
Indiana Tuberculosis Association.
Indiana State Division of Public Health.
Indiana Congress of Parents and Teachers.*

Indiana Federation of Women's Clubs (control of cancer campaign).

Child Health Week and May Day organization which had for its 1935 motto, "Prevent Diphtheria Now."

State Fair Committee.

A typical letter received from a registered nurse of New York, who, at her request, was placed upon the mailing list, follows:

"I find the material very interesting and helpful in my work and greatly appreciate having my name on your mailing list."

(1) *Campaign for the prevention and control of cancer.* A letter from the president of the Indiana Federation of Clubs follows:

"We hope through such a program to give to the public the newer knowledge of cancer; to enlist public support and cooperation in an effort to lessen the number of cases and deaths from cancer; and to create a public opinion that will help the medical profession to provide the necessary teaching, diagnostic and hospital facilities for the effective treatment and control of this disease.

"It is essential that such a program have the full confidence, approval and support of the medical profession. It will be our purpose to present the plan of the proposed program and all activities in connection with the program, to the Cancer Committee or other officially designated representatives of the State Medical Association, for approval and to work in close cooperation with the Association."

(2) *Cooperation with the Committee on Puerperal Mortality.* The following letter was received from the chairman of the state Committee on Puerperal Mortality:

"The Committee for the study of Puerperal Mortality presented its report last fall at the state meeting, securing adoption of the same. In part that report is as follows:

"'We recommend and urge that this Association undertake, through the proper channels, the instruction of the child-bearing public in each

* Under the direction of the Bureau an article upon health appears in each of the monthly issues of the bulletin of the Congress.

county of this state regarding the large part of the responsibility for puerperal mortality they now carry and of which, we believe, they are unaware.

"'We recommend that in Indiana any well woman who is pregnant, being married, consulting regularly a trained, conscientious licensed physician, arranging to pay fairly for her care, need have little fear about the reproduction of her kind in safety.'

"It was originally planned to carry out in each county, under the auspices of the county medical society, a meeting of lay people for educational purposes.

"The secretary of the Carroll County Society informs me that in 1934, with great publicity, intensive effort and good will, such a meeting for Carroll County was held. It was addressed by Dr. Mendenhall. The county medical society was dumfounded and flabbergasted to find but one woman attended their meeting, she being their county nurse.

"If Carroll County failed to accomplish a lay meeting, it would appear a great waste of effort to ask other societies to do that thing. A way might be found later to produce attendance results through the influence of parent-teacher contacts.

"It seems advisable to place the request for lay information before the State Committee on Publicity. I believe that committee will know best how to go about the problem. If your committee will accept the responsibility it will greatly help the program, as we had suggested in the above report.

"Another point in which I have been personally interested. The Marion County Society recently adopted a resolution requiring all members who make talks to the laity to file their names and subjects with the proper committee of the local society. I understand this also requires an outline of the material which they propose to submit to the public in their discussions. Such a move is in the right direction for obvious reasons."

It was the opinion of the Bureau that the committe chairman's comments in regard to the difficulty of having a lay meeting are correct, and the suggestion was made that another letter be written to the chairman asking him for any further suggestions he may have in regard to the best method of bringing this matter to the attention of the lay public. The Bureau approved the release of an article upon the subject of "Puerperal Mortality" and suggested that ideas for this release be obtained from the chairman of the Committee.

(3) *Co-operation with the State Fair Committee.* At the request of the State Fair Committee the Bureau of Publicity prepared 10,000 pamphlets for distribution entitled, "Information Regarding the Prevention of Contagious Diseases." These pamphlets were distributed by the State Fair Committee to all those who visited the health building at the Fairgrounds during the state fair.

(4) *Summer Round-Up.* For a number of years the American Medical Association has cooperated with the National Congress of Parents and Teachers in promoting the summer round-up programs which include physical examination of children of school age. This year a request was received from the American Medical Association asking the Indiana State Medical Association to cooperate in this movement. The letter follows:

"For approximately six years the American Medical Association has been cooperating with the National Congress of Parents and Teachers in the Summer Round-Up of the children. This cooperation has been expressed through the presence of a representative of the American Medical Association on the National Advisory Committee for the Summer Round-Up. The Director of the Bureau of Health and Public Instruction has been that representative. The Board of Trustees of the American Medical Association has annually presented a gift to the National Congress of Parents and Teachers through *Hygeia*, of one-half the annual supply of examination blanks for the Summer Round-Up.

"As you are undoubtedly aware, many county medical societies have participated in the Summer Round-Up by helping in physical examinations of pre-school children.

"There has been evident in the National Advisory Committee a great desire to improve the Summer Round-Up by working away from the established method of group clinics toward examinations in the privacy of the office of the family physician. This is expressed as a policy for the first time in the enclosed leaflets which are sent for your information. Your attention is called particularly to the passages marked in red.

"In view of the fact that the writer of this letter is the present representative on the National Advisory Committee, any suggestions which may come from your association will be gratefully received, and in view of the cooperative spirit which is being shown by the officials of the Summer Round-Up I feel sure that they will be glad to have suggestions from the medical profession."

The official opinion of the Bureau in this matter follows:

"In Indiana there is a close cooperation between the Indiana State Medical Association and the Indiana Congress of Parents and Teachers. The Bureau felt that it could see no conflict in the above plan as long as the children who were able to pay, paid a suitable fee for the examinations."

Following a statement of the official action of the Bureau a letter was received from the director of the Bureau of Health and Public Instruction of the American Medical Association, an excerpt of which follows:

"There is a feeling in the Advisory Committee for the Summer Round-Up that examinations should be paid for wherever possible and I think we will be able to get a concrete declaration to this effect into the instructions for 1936."

VIII. Reports on Talks by Physicians Before the Laity.

In conjunction with the State Division of Public Health the Bureau of Publicity perfected a system of receiving reports on speeches made by physicians before the laity. According to tabulations, since September a year ago the number of these talks reported by each county follows:

County Medical Society	Number of Talks
Ft. Wayne Medical Society	8
Bartholomew	1
Boone	4
Carroll	1
Cass	19
Dearborn-Ohio	5
Decatur	2
DeKalb	14
Delaware-Blackford	25
Fayette-Franklin	1
Floyd	6
Fountain-Warren	2
Gibson	2
Hancock	7
Hendricks	5
Henry	1
Huntington	18
Jackson	3
Jennings	1
Knox	3
Lawrence	10
Madison	9
Marshall	1
Miami	9
Montgomery	8
Morgan	3
Orange	1
Perry	3
Porter	2
Pulaski	6
Putnam	1
Randolph	5
St. Joseph	5
Tippecanoe	25
Vanderburgh	2
Vigo	55
Wabash	1
Wayne-Union	1
Wells	1
Whitley	3

The Bureau wishes to thank the secretaries of the component county medical societies for their help and cooperation in sending in these reports, and it urges the continuance of this service.

IX. Speaking Engagements.

During the year the Bureau supplied speakers for the following meetings:

1934

Sept. 13—Lake County Medical Society, Gary.
Oct. 8—Gibson County Medical Society, Princeton.
Nov. 5—Woman's Auxiliary to the Vigo County Medical Society, Terre Haute.
Nov. 13—Fayette-Franklin County Medical Society, Connersville.
Dec. 11—Rotary Club, Union City.
High and Grade Schools, Union City.

1935

Jan. 9—Parent - Teacher Association, Lowell School, Indianapolis.
Jan. 11—Woman's Auxiliary to the Wayne County (Michigan) Medical Society, Detroit, Michigan.
Mar. 20—Parke-Vermillion County Medical Society, Clinton.
Mar. 20—Decatur County Medical Society, Greensburg.
Apr. 9—Knox County Medical Society, Vincennes.
May 14—Fayette-Franklin County Medical Society, Connersville.
June 5—Woman's Auxiliary to the Madison County Medical Society, Anderson.
July 29—Kiwanis Club, French Lick.

X. Newspaper Releases Published Since Last Report of Bureau.

So-called Cancer Cures.
Encephalitis in Indiana.
Annual Session of Indiana State Medical Association at Indianapolis (6 releases).
President's Address, Annual Session, Indiana State Medical Association at Indianapolis.
Bodily Bookkeeping.
Holiday Health.
New Year's Resolutions.
Common Sense and the Common Cold.
Secretaries' Conference.
Debunking the Vitamins.
"Immunize Now"—May Day Motto.
Graduate Educational Meeting of Indiana State Medical Association.
Not in Indiana.
Safe and Sane Swimming.
July Fourth Suggestions.
Appendicitis.
Public Health Enemy No. 1.
Good Health Exhibit at Indiana State Fair.

These releases were distributed as follows:

1. One hundred and fifty to the president of the White Cross Guild of the Indianapolis Methodist Hospital, for distribution to members of the guild.

2. Fifty to the director of the Division of Public Health Nursing of the Indiana State Division of Public Health.

3. Fifty to the state director of the Department of Health of the Woman's Christian Temperance Union of Indiana.

4. Each councilor and secretary of each county medical society gets a copy of each article.

5. Editors of two hundred newspapers and magazines of the state receive copies. Besides these, the articles often are carried in the *Hoosier Health Herald* of the Indiana Tuberculosis Association, and several other health publications of the state, including twelve religious, fraternal and farm journals.

XI. Radio Talks.

Radio talks, as follows, have been given each week through the year on Saturday night over station WFBM of Indianapolis:

Lye as a Poison.
Preparation of Children for School.
How Can You Know.
So-called Cancer Cures.
Encephalitis in Indiana.
High Blood Pressure.
Competitive Athletics.
Hoosierland's Health Harvest.
Ventilation.
Cold Facts.
A Word to Hunters.
Observe Health Rules in Prevention of Colds.
Depression and Appendicitis.
Thanksgiving Eating.
Sinus Trouble.
Bodily Bookkeeping.
A Safe Christmas.
Holiday Health.
New Year's Resolutions.
Common Sense and the Common Cold.
Home Safety.
Invisible Enemy.
How Mothers Can Help Prevent the Spread of Contagion in School.
Debunking the Vitamins.
Basketball and Physical Examinations.
Measles.
Your Years and Your Age.
Exercise.
Spring Tonics and Spring Fever.
Spring Cleaning.
Spring Exercise.
The Family Medicine Cabinet.
Immunize Now.
Eye Examinations.
Keep Your Eye on the Ball.
Cracked Toes.
Vacations and Typhoid.
Not in Indiana.
Strenuous Week Ends.
Safe and Sane Swimming.
The Common Drinking Cup.
When to Remove Tonsils.
July Fourth Suggestions.
Hot Tips on Keeping Cool.
Infant Care in Warm Weather.
Appendicitis.
Chiggers.
Public Health Enemy No. 1.
Poison Ivy.

XII. Financial Statement of Bureau.

The expenditures of the Bureau from September 1, 1934, to September 1, 1935, follow:

Clipping service	$53.24
Postage	79.39
Stationery and mimeograph supplies	67.23
Printing	11.50
Traveling expenses of speakers	49.50
Historical work	149.56
Miscellaneous	7.22
Total expense	$417.64

The Bureau was allowed by the Budget Committee $500.00 for the year 1935. Of this amount the Committee has spent $160.75 from January 1 to September 1, 1935, leaving a balance of $339.25 unexpended in the budget for the remainder of 1935.

Respectfully submitted,

WILLIAM N. WISHARD, M. D., Chairman.
J. H. STYGALL, M. D.
E. D. CLARK, M. D.

REPORT OF COMMITTEE ON CIVIC AND INDUSTRIAL RELATIONS

House of Delegates, Indiana State Medical Association:
Gentlemen:

The Committee on Civic and Industrial Relations reports that there has been very little demand on the committee for services in adjusting controversial matters. Two cases were reported, one directly by the interested doctor and the other from the executive office. Upon receipt of notice from the executive office in the latter case, the doctor in question was written to immediately, and asked to prepare a statement of facts in the case under controversy, but no reply was ever received and therefore no report can be made as to the final disposition of the case. The other case was representative of the usual difficulty found in every controversy that arises between the insurance carrier and the attending physician. The doctor in this case had sent repeated bills without reply. After presenting the case to the committee a detailed statement of the type and frequency of services rendered was made and was forwarded to the insurance carrier, and we are happy to report that in less than a week, without further correspond-

ence, a check covering the amount of the bill was received by the doctor.

We wish to reiterate that if the attending physician would take the time to go into detail in setting out an exact word picture of the injury sustained and the nature of the services rendered, less controversy would result. We would also ask the members of the Indiana State Medical Association to present their claims to the committeee, which will endeavor to iron out the difficulties.

During the last legislature the committee also kept in touch with the measures in the proposed compensation enactment in which the physician might be interested.

Respectfully submitted,

August F. Knoefel, M. D.
W. C. Moore, M. D.
A. J. Lauer, M. D.

REPORT OF THE COMMITTEE ON HOSPITALS AND MEDICAL EDUCATION

House of Delegates, Indiana State Medical Association:

Gentlemen:

Which of the many medical programs recently discussed by laymen possessed by the New Deal psychology will tomorrow take definite form in legislative action and social organization is impossible to predict; but some of them are likely to be, and soon; and whichever they are, they may lead to radical changes in the fields of hospitalization, medical practice, and therefore indirectly, of medical education. Evolution, however necessary, always brings hardship to those suddenly required to meet old responsibilities from new angles; it will be trebly hard if instead of changes incident to the normal development of our profession we find ourselves required to put destructive radical ideas into practice. We may well remind ourselves, however, that the present-day general interest in health problems, and the insistent demands for more comprehensive methods of benefiting by those already solved, are the logical consequence of the splendid control of disease which the medical profession has made possible; also, that ours is the one profession which should at once assume leadership in the guidance of social trends gaining so rapidly in momentum, and some in the wrong direction. Other groups are eager to control, but the care of the sick is the physician's particular responsibility; leadership, therefore, today becomes his duty. It would be most unfortunate if the more sober minded of the public get the idea that our chief interest in the many radical medical movements now being stimulated is merely one of self-protection, or interpret our attitude as one of attempting to maintain an impossible status quo. The recommendation of this committee, therefore, is that in view of this present crisis the Indiana State Medical Association, through its proper officers and units, plan a much more progressive campaign of popular education and leadership.

HOSPITALS

The development of the modern hospital the world over is in greatest degree the product of the genius of the American surgeon. It was he who first divorced hospitalization from poor relief; demonstrated that the hospital is just as much a surgical instrument as is his scalpel and hemostat, and the proper place for millionaire as well as pauper in need of operation. About the beginning of the twentieth century this was recognized to be true also of medical and obstetrical patients. The early hospitals were largely private institutions; but the advances in our profession and the rising cost of hospital maintenance have practically eliminated these. The result is the modern public hospital, open to the indigent as well as the rich, supported by the community, under lay control, and fully equipped to assist the physician in his care of all medical and surgical conditions. Each well organized hospital has a trained business superintendent; a supervisor responsible for all nursing; a nurse in charge of the operating room suites; a dietitian sufficiently trained not only to carry out the doctor's orders but to advise him what these should be; an x-ray operator who can do far more than take pictures; a laboratory man who is more than a mere technician; often a physical therapeutist who alone understands his apparatus and its therapeutic possibilities; and a board of directors, usually all laymen, who without advantage to themselves give of their time and often of their money to maintain a hospital for the public good. Such an institution can never hope to more than balance its maintenance budget; it seldom does that. For its investment in grounds, buildings, equipment, repairs, replacements, expansion, and too often for its annual budget deficit, it must depend on bequests, individual gifts, popular subscriptions, and municipal, county, or state appropriations. To the local medical profession such a hospital offers inestimable advantages, for in its wards he, as medical student, received the best part of his medical education, and as a practitioner he, without expense to himself, is assisted in his care of his patients by all those means which modern medical science has to offer and which he could never provide for himself. However great an advantage the hospital may be to the public, it is still a greater one to the physician.

Since a small hospital would never be justified in organizing such a staff and providing such equipment, the problem of its minimal size has received considerable study. One suggestion is, an average bed population for the entire year of at least 100. This figure others would even double. It is to be regretted that the plan adopted three decades ago in Indiana contemplated county hospitals, the most of them of forty or fewer beds, rather than as did some other states a program of a few large district hospitals. Of course a certain number of small hospitals should be scattered over the State for emergency cases, but

they should not attempt the status of general hospitals and are best maintained as affiliated branches of fully equipped ones. An exception should be made of the Catholic hospitals, for Nursing Orders seem able to make even small hospitals more efficient than their neighbors of equal size. The unfortunate fact today is that America, and this certainly is true in Indiana, has far overbuilt any reasonable hospital program (except for mental cases). The problem of the future is about half as many beds in better hospitals. The general hospitals of America during the past year averaged a bed occupancy of only about half their capacity; an enormous economic loss. In Indiana the few which are well equipped and well staffed averaged from 62 to 76 per cent of full occupancy; others, equally large, about 43 per cent; the 52 smaller hospitals, about 41 per cent; while 25 of these last averaged only 32 per cent full. This situation is well revealed by ambulance trips which bring patients to the first group of hospitals, sometimes passing on their way four or more of the others.

The above situation is not only economically unsound, it is fraught with great danger. The hospital promises to become the strategic center of any radical program for more or less socialized medicine which may be adopted, whether this take the form of health insurance, group practice, industrial surgery, adequate care for the indigent sick, or state medicine. Health insurance is certain to come in a deluge just as soon as the various insurance companies shall have accumulated sufficient actuarial experience to determine premiums; the industries, already obliged by law to take care of their injured employees, now believe it good policy to care for the latter also while ill, and for their families as well; that the general practitioner needs the assistance of specialists in his study and treatment of individual cases is now accepted by the public as almost axiomatic; economists realize that disease, theoretically unnecessary, always involves economic loss, and insists that it be prevented, and, if present, well treated; society has begun to realize that the only way a man can keep himself and his family well is to see to it that his poor neighbors also are healthy; the number of families receiving financial support from various sources has recently increased enormously, and sick relief is not its smallest item; and, finally, these half or two-thirds empty hospitals beckon to the modern "reformer," who sees in them both the proper instrument for the exploitation of his theories and the best argument for a change in the present system. To the medical profession also, therefore, the hospital furnishes the concrete problem which demands its attention, rather than the many more or less intangible ones which are receiving far too much discussion. For illustration, we believe it to be generally granted that in the long run not even the pauper will accept the care of a physician whom he did not choose, and who, since on a fixed salary, would prefer not to care for him.

It is the members of the boards of management of hospitals, the most of them laymen, who need, and usually would welcome advice, by an organized medical profession, provided the latter comes to them united in its opinion on the essential details as to the manner in which public needs should be met, and is willing to discuss the medical future in a realistic objective manner, unafraid of the possibility that present-day practices, however excellent in the past, may need modification.

One of the first goals to attain in such interviews is to persuade these boards of management that the hospital for which they are responsible should be a part of, and the center of, the medical community which it serves; not, as so often is suggested, an institution in, but not of, this community; to dissuade them from maintaining arbitrarily limited staffs, even of full time well paid doctors, to take charge of all the pay patients admitted. Exception, however, should be made of teaching hospitals and research wards. Another problem is to persuade them that while the general hospital staff should include all local physicians in good and regular standing, and should allow them all the assistance of the hospital organization, yet that the mere legal right (a license to practice) does not justify the board in allowing a relatively untrained man the freedom of the hospital to perform all operations and to treat all medical conditions; and that the decisions as to those who should be allowed this privilege should rest with the organized medical profession of that community. Another problem of the profession is to assist these boards of directors in their study of all the medical reform schemes proposed, lest they fall prey to exploitation in wild-cat social and financial ventures.

Hospital administration has become a specialty. The National Hospital Association is a strong, well organized body, quite independent of the medical profession. One result of this independence has led, probably unconsciously, to the exploitation of the professional services of the hospital in the interest of its general maintenance. It is estimated that even the full pay patient pays for his hospital care alone only about 65 per cent of what it costs the hospital to furnish it (estimated on the basis that the hospital, like all business institutions, had to pay interest on the bonds which bought the grounds and built and equipped the building, and provide for their retirement). Yet even then often he pays too much, while part-pay patients pay far too much in proportion to their incomes. All patients certainly should pay something, but the amount cannot be at all proportional to the value of the services rendered. Even for the care of the indigent the hospital should receive something from those charitable funds provided for poor relief, just as do the grocer, coal dealer et al., who also supply the poor with the

necessities of life. Nevertheless the balance maintained between the various charges made for hospital service works injury to the interests of the medical profession. For illustration, it is not fair to the doctor that as much as possible of that unpaid 35 per cent for hospitalization be made up from laboratory and x-ray fees and the lodging of private nurses; neither is it fair that, in order to make up still more of this deficit, the hospital allow its laboratories to compete with other privately maintained laboratories in the examination of out-patients.

Although a hospital should be far more than a hotel, yet there is no strictly hotel problem which the hospital must not meet; nevertheless any hotel would go bankrupt were its business management as amateurish as is that of the average hospital of the same size. To correct the loss thus sustained would balance no small part of the hospital's yearly deficit. Hotel prices are well standardized and well understood. The full-pay patient should expect to pay about as much for his room and three meals (if he is on "regular diet") as he would in a hotel of the same size, similar quality of construction, and located in the same region. As it is, he usually pays less than the cost-price to the hotel, and the hospital makes up as much of the deficit as it can from the x-ray and other laboratory services, with the result that the patient finds the scientific study of his case very expensive and avoids all of it he can, although to benefit by that service probably was one of the chief reasons which decided him to enter the hospital. Certainly the laboratories should little more than balance their budgets in the case of full-pay patients, while the reduction in rates for part-pay patients should affect their laboratory fees first.

The problem of hospital nursing is another item which at the present time should receive very careful study. The patient who enters a hospital certainly expects to receive expert nursing attention. He soon finds, however, that to obtain this he must employ private nurses for whose hours of duty and fees the hospital assumes little or no responsibility. We look forward to the time when only the exceptional patient will require a private nurse, since the hospital will assume, as it should, full responsibility for the adequate care of the great majority of patients it admits, regardless of what they can pay. For many patients this, like the cost of hospitalization and laboratory examinations, may need to be greatly reduced; certainly it should not be the only item for which the patient pays in full, and not to the hospital.

It is of great interest that the speaker of the day at the opening of the first training school in America, at Bellevue Hospital, New York City, in 1872, emphasized two points: that the education of nurses was a community service; and that such education would be expensive. The enormous advances in surgery during the following three decades changed all that, for it was the pupil nurse working without wages for her degree who made possible the multitude of hospitals which like mushrooms sprang up all over the country, until recently increasing in number at the rate of 100 per cent each decade. Since then the standards of nursing training schools have gradually been raised, making them, like the medical schools which had a similar history, less and less of a financial asset to the hospital. This reform alone has closed many hospitals. A real training school, like a modern medical school, is a very expensive institution to run (that is, if the pupil actually receives the education in nursing which her diploma implies). The argument in favor of a training school in each hospital has been answered: there is today a sufficient number of graduate nurses to meet the public's every need, and this number can be maintained by the graduating classes of relatively few schools. No longer for the public's nor the pupil nurse's good need patients be subjected to the care of the latter. Such nursing in the very nature of the case is inefficient, since the schedule of each pupil is purposely so planned that she leave each ward just as soon as she has become efficient in its service, and at once in another ward begins to learn the quite different problems of some other hospital department. Certainly the time is come that we insist that if the hospital is to be in truth a real hospital it hold itself as responsible, and even more so, for the efficiency of its nursing as for the service of its diet kitchen, pharmacy, and laboratories. That done, the patient who desires "attention" in addition to all necessary "service" can pay for as much of it as he wishes. Training schools for nurses there must be, but they should be maintained as educational institutions maintained on a budget of their own. Some hospitals already are beginning to employ a greater and greater number of graduate general service nurses who, assisted by senior pupil nurses, care for the patients. This plan followed, and the hospital becomes a real hospital, and not as the majority of them are today, merely professional hotels, which receive patients who, while they no longer need bring their bedding and food (as they still do in some countries), still must employ private nurses, and at enormous expense, if they are to expect adequate nursing care for the trouble which brought them to the hospital. The problem of the private nurse in the home, her hours, and her fees, does not come under the scope of the committee; but the private nurse in the hospital does. The Graduate Nursing Association (would that the medical profession could organize itself for as united, well directed, efforts before Legislatures and Hospital Boards as do these women) recognizes the hospital to be the strategic center in which to establish the general acceptance of certain demands which are to apply especially to private nursing in the homes.

A hospital is a very expensive institution to run well; nevertheless the charges now made are too high to permit it to give its community the advantages of the medical service which it should have. Greater endowments, larger appropriations, and more gifts, therefore, should be sought. Meanwhile the hospital, on its part, should win the confidence of its community by the efficiency of its business administration, the excellence of its nursing, and the quality of its scientific departments; that alone will bring better support. The duty of the doctors in the matter to us seems clear. They should support their local hospital enthusiastically, giving of their time to make it a success. It should be kept at least 75 per cent full. Even though small and limited in the scope of its work, yet even the smallest hospital can do the little it does as well as the best. It should not undertake that which it cannot do well, but should complete its service by affiliation with larger institutions. The hospital today is the strategic center of the medical profession. Let the doctors and the hospital trustees cooperate, and we need fear no scheme of socialized medicine thus far proposed.

MEDICAL EDUCATION

The problems which the medical school of a State University today must meet are many and very difficult. The State Legislature decides the amount of its appropriation, and may, if it desires, limit in certain ways its choice of students; but medical education knows neither legislative bodies nor social programs. The medical faculty is honor bound to give each student it accepts a basic medical education the quality of which is determined by the consensus of opinion of a nation-wide group of educators. This faculty alone should judge the maximum number of students its appropriation will enable it to educate, should select from among those eligible the ones to matriculate, and should pass final judgment on the personal fitness of each applicant for the medical degree to care conscientiously and well for sick patients, whoever the latter may be, whatever the social plan under which he must practice, and whatever the scheme of remuneration for his services.

The school should, however, acquaint the student in advance of his matriculation with the social forces likely to affect him after he shall have received his degree, and always emphasizing the fact that medical practice is primarily a self-sacrificing service to fellowmen, and never to be chosen as a gainful occupation; also, that the doctor can no longer devote himself purely to his practice, as did those of two generations ago, but is responsible to his community for that education in preventive medicine which the past fifty years has made possible, and should assume leadership in his community in all movements in the interest of public health and of the adequate care of all sick of all classes. It is also our feeling that to the medical faculty of a State university should be transferred some of the functions of the State Board of Medical Registration and Examination, for every argument advanced twenty-four years ago in favor of the creation of such boards, and by the American Medical Association which led in the campaign for their creation, has long since been answered by the improvement in medical education.

Our recommendation is that the Indiana State Medical Association heartily endorse the efforts of the Medical School, and in every possible way assist Indiana University to obtain for the Medical School adequate public and legislative support.

Respectfully submitted,

CHARLES P. EMERSON, M. D., Chairman.
T. W. OBERLIN, M. D.
ROBERT W. HARRIS, M. D.

REPORT OF COMMITTEE ON NECROLOGY

House of Delegates, Indiana State Medical Association:

Gentlemen:

And so "The March of Time" went on, and another year slipped away in the lives and vocations of the members of our beloved profession and their families. Truly the year has been marked with milestones for every family in one way or another. While many families have seen the climax of their happiness and success during the past twelve months, still others have found that "Into each life some rain must fall, Some days MUST be dark and dreary."

The report of the moment includes in its scope the deaths of physicians who were called, "Come now, Come at once," and they answered, "The Great Emergency" between August first, 1934, and August first, 1935.

Last year we listed in this column 99 losses in our ranks. This year we register 98, a small margin of decrease, yet life itself, so precious and so dear to all of us, is scheduled on no greater margin of safety.

So far as the committee could determine, we added to our numbers in the profession in Indiana during the fiscal year 32 new doctors. Some were native and home graduates; some were from sister states and came to us by adoption. Thus we added less than half the loss.

There are some interesting items in this report that differ from all others thus far submitted by this committee. They will be noted by the reader as he continues down the lines. First, and most important, is the fact that the age average on this list would indicate that the longevity among our profession is gradually increasing for the average life of those of last year was 71 plus, while the average of those herein reported is 81 plus—a very wonderful gain.

January of 1935 led the list in toll, having 12 for its share. November of 1934 and April of 1935

came next with 10 each; then came February of 1935 with 9; September of 1934 and May and July of 1935 each claimed 8; 7 died in June of 1935 and 6 in October and December of 1934. August of 1934 took 5 while March of 1935 trailed the list with only 4 and this is the month that usually claims the largest group. This is accounted for, however, by the fact that there were several accidental deaths in other months.

The youngest of the group was Dr. Robert John Bickel of Fort Wayne who died November 17, 1934, at the early age of 31 years. The oldest was Dr. Daniel Sigler of Elwood who passed away December 17, 1934, age 91 plus.

One woman physician was numbered among the fallen of the year: Dr. Alta K. Boram of South Bend died April 18, 1935.

The combined ages of these doctors was 6,001 years, as nearly as could be computed because of the difficulty of complete accuracy of data. The average time spent in practice was approximately 33 years, as against 29 years of last year's number.

The decades in which these deaths occurred is again interesting. It will be noted that more doctors died long after the "four-score-and-ten" period than has been recorded in any previous report from this committee—a happy thought for all those who now wish to live well up toward the century mark. Two died in the thirties; 5 in the forties; 18 in the fifties; 22 in the sixties; 26 in the seventies; 14 in the eighties; and 3 in the nineties. The exact decade of death of the remaining eight could not be determined.

As of last year, heart disease led the list in the causes of death, having 32 to its credit; pneumonia came second with 18; cancer of all organs was third with 11 victims; cerebral hemorrhage totalled 10; influenza took 6; peritonitis, 3; intestinal obstruction, 2; appendicitis, 2, and accidents, 5, of which 2 were by automobile, 2 by airplane, and 1 by drowning. There was 1 suicide. The cause of death in the remaining number could not be ascertained.

Indiana Medical College and the Indiana University School of Medicine graduated 24; Rush, 10; Northwestern, 5; Kentucky School of Medicine, 7; Eclectic schools, 4; Homeopathic schools, 3; Bellevue, 6; Jefferson Medical, 5; Fort Wayne, 3; P. and S. of Indianapolis, 3; Physio-Medical of Indianapolis, 5; Miami Medical, 6; Johns Hopkins, 5; University of Pennsylvania, 4; and Western Reserve, 3. The school of choice of the remaining small number was not available.

And thus the curtain of life went down upon the stage of action for a goodly number of the most valuable actors who have ever devoted their time, energies and minds to the benefit of mankind.

While the earthly rewards bestowed by a demanding and unappreciative general public upon members of the medical profession are seemingly few and of comparatively lesser importance, yet it is ours to hope with the great poet that

"Somehow, somewhere, I know not when,
But I shall meet and conquer sorrow,
For I know my sad todays
Will be bright and glad tomorrows."
—Mendleburn's Memories.

Respectfully submitted,

George G. Richardson, M. D.,
Chairman.

REPORT OF COMMITTEE ON SECRETARIES' CONFERENCE

House of Delegates, Indiana State Medical Association:

Gentlemen:

On January 27, 1935, the annual secretaries' conference was held at Indianapolis, with the largest attendance we have ever had. Mr. William J. Burns of Detroit, Dr. Oliver J. Fay of Iowa, Dr. Walter Bierring of Iowa, and Mr. Albert G. Milbank of New York City were the guest speakers.

The county secretaries of the state were invited to a dinner given by the medical department of Indiana University, in connection with the postgraduate course. Dr. Bierring, president of the A. M. A., was the guest speaker at this meeting. Attendance was good.

Respectfully submitted,

A. M. Mitchell, M. D., Chairman.
S. T. Miller, M. D.
Claude B. Paynter, M. D.
O. M. Graves, M. D.
E. H. Brubaker, M. D.
J. L. Allen, M. D.

REPORT OF COMMITTEE ON GRADUATE EDUCATION

House of Delegates, Indiana State Medical Association:

Gentlemen:

The Fourth Annual Graduate Educational meeting was held again at Evansville, Indiana, in conjunction with the First District Medical Society on May 8, 1935. There was a paid attendance of seventy-three present.

The members of this committee wish to express their appreciation to the local committees and the First District Medical Society for their cooperation as well as for the generous contributions in making up the deficit incurred. This committee is convinced that its function is such that it cannot and should not be a self-supporting unit. We feel that in order to have a successful and well attended Graduate Day, a man of national prominence is almost essential. Your committee feels that a fee sufficiently large to defray such expenses as are necessary to conduct such a meeting would exclude many members of the society who would be most appreciative as well as needful of

the work. We feel that such money as would be spent in order to bring a man of national prominence to the meeting should not come from the local medical society, but it should come from the State Association.

It is gratifying to this committee to report that we have had three requests for further graduate meetings for this fall. We feel that interest in this type of meeting is increasing.

Respectfully submitted,

C. J. CLARK, M. D., Chairman.
B. G. KEENEY, M. D.
KEITH T. MEYER, M. D.
ROBERT MOORE, M. D.
W. L. PORTTEUS, M. D.
WALTER H. BAKER, M. D.
M. J. BARRY, M. D.
W. D. GATCH, M. D., ex-officio.

REPORT OF COMMITTEE ON DIPHTHERIA PREVENTION

House of Delegates, Indiana State Medical Association:

Gentlemen:

The Committee on Diphtheria Prevention has continued to act along the lines of previous years, and begs to report that the diphtheria situation in Indiana seems definitely better than in other years, though the number of deaths for the first seven months of the year has been practically exactly the same as last year for the corresponding period. Interesting is the observation that very few school children are dying of diphtheria. This tends to indicate that the campaign of immunization was rather effective on diphtheria prevention, inasmuch as they were school children in particular who were immunized.

The months of October, November, and December usually have the highest rates in the year. This is probably because school has convened shortly before. This year we have reason to hope that the rate will be lower than in previous years for this year. In such case we should be able to report a new low record, and are confidently expecting that the number of deaths for the year will fall below the one hundred mark.

The interest in immunization continues in several communities, notably in South Bend where there is being put on highly effective programs of immunization. The profession must continue to emphasize the fact that it is the pre-school child who needs immunization most.

The committee anticipates no change in policy in its activities during the coming year.

Respectfully submitted,

THURMAN B. RICE, M. D., Chairman,
E. V. WISEMAN, M. D.
E. N. MENDENHALL, M. D.
J. O. RITCHEY, M. D.
AUSTIN SWEET, M. D.

REPORT OF COMMITTEE ON THE STUDY OF HEALTH INSURANCE

House of Delegates, Indiana State Medical Association:

Gentlemen:

This committee is required to keep in touch with all the activities of the national organization in its relations to the social security plans of the present administration as they may affect the medical profession. So far the medical profession has been able to counteract the most insidious plans that have been advocated but until general affairs have been stabilized in a more rational manner, there can be nothing done by the profession save to counteract in every way possible, the general plans for a complete socialization of the practice of medicine. Widespread information as to the dangers of the socialization of medicine, and a better understanding of all its failures in European countries will do more to help us than any other thing. Until further plans have been developed we can only act in the defensive as we have done. An effort has been made in co-operation with headquarters to supply debaters with material in preparing their debates upon the question of compulsory health insurance. The material upon the negative side of this question has been hard to obtain, but your committee has presented a plan whereby we may be able to furnish material of value.

Respectfully submitted,

M. A. AUSTIN, M. D., Chairman.
WALTER KELLY, M. D.
O. R. SPIGLER, M. D.
BEN MOORE, M. D.
A. E. STINSON, M. D.
W. U. KENNEDY, M. D.
L. T. RAWLES, M. D.

REPORT OF THE COMMITTEE ON VETERANS' HOSPITALIZATION

House of Delegates, Indiana State Medical Association:

Gentlemen:

Your committee has had very little to do, and consequently very little to report.

The committee has steadfastly opposed the extension and enlargement of Veterans' Hospitals except for chronic or incurable cases. This is not in any way because we are opposed to the benefits that the government may see fit to provide for the veterans. This is a debatable question upon which every one is entitled to his own opinion, but we do believe that if hospitalization is to be supplied to veterans with non-service-connected disabilities, the proper place for such hospitalization is not in government hospitals but in the nearest qualified hospital of the veteran's own choice, with services to be supplied by the physician or

surgeon of his choice. We have had numerous proofs that this also is the wish of the veterans themselves. In the Indiana State Convention of the American Legion, such a resolution was adopted almost unanimously. We believe that if these immense hospitals are built and equipped all over the United States at government expense, they *never* will be abandoned, and that when the present need of the veterans is past, the government will take over other classes to maintain the hospitals at capacity, and that those hospitals will ever be a serious threat of state medicine.

Respectfully submitted,

C. C. Bassett, M. D., Chairman.
F. S. Crockett, M. D.
I. M. Casebeer, M. D.
R. A. Craig, M. D.
W. A. Doeppers, M. D.

REPORT OF COMMITTEE ON STUDY OF HIGH SCHOOL ATHLETICS

House of Delegates, Indiana State Medical Association:

Gentlemen:

The Indiana High School Athletic Association has made a change in tournament arrangements for the basketball season of 1935-1936. There has been considerable clamor from some sources for a change that will avoid the playing of three games in one day. The proposed tournament schedule avoids this feature which has provoked so much discussion, and which many people honestly think is detrimental to health. It is doubtful if three basketball games in one day constitute a health hazard, providing, of course, that the participants are properly conditioned and in sound health.

The officers and members of the Indiana High School Athletic Association are as firmly as ever determined to have adequate medical examinations performed to make certain of the physical fitness of all participants. It is imperative that the medical profession cooperate fully in these examinations. Every year it comes to our attention that cards are signed attesting to sound health where no examination has been made. Parents do not desire this, participants may be harmed by it, and the one who does it discredits himself.

Isolated and infrequent cases of chronic disease in boys taking active part in athletics have come to our attention. Careful preliminary examination and intelligent medical supervision in cooperation with the coaches will prevent these occurrences. The place of the medical profession in the problems arising from competitive athletics should be, it seems to us, to determine first the wisdom of entering competition in each individual case, and second to determine at all times whether the individual competitor is fit for the contest. Conditioning of the players is largely the coach's prerogative. He is trained for it, and no coach can be consistently successful unless he is adept at it. On the other hand, impaired health or physical infirmity will be detected and properly managed only by the members of the medical profession. We are trained for this phase and no other member of the community is so trained.

Insofar as we know the life insurance companies have not felt that competitive athletics are hazardous enough to warrant an increase in rate or to influence rejection of an applicant. This does not mean that abuses do not creep in and that injury to health may not result from athletic activity. A broad-minded view of the problem will certainly approve of some method of control. The existing high school authority has been formed gradually and has acquired considerable experience in its problems. The State Medical Association has been interested officially by a committee for four years. It is a curious fact that little or no interest is to be found in the abuses and injuries occurring in independent ranks and on vacant lots, town halls, and church gymnasia. The participants in these classes are also growing boys, and in many cases are the same boys performing under high school colors. Yet little solicitude is expressed whether they play one or ten games a day, or from dawn 'til dark, as long as it is not under the auspices of the Indiana State High School Athletic Association.

We must admit that some sort of control is more desirable than a haphazard, unsupervised system of athletic activities for growing boys. Our part in the program is to make a careful examination of the prospective athlete when we are asked to do so.

Respectfully submitted,

W. D. Little, M. D., Chairman.
H. C. Wadsworth, M. D.
J. E. P. Holland, M. D.
R. H. Pierson, M. D.
G. A. Thomas, M. D.

REPORT OF THE PUBLIC RELATIONS COMMITTEE

House of Delegates, Indiana State Medical Association:

Gentlemen:

Since your Public Relations Committee has received no instructions from you regarding any work to be done, we have not called a meeting during the past year. We stand ready to serve in any capacity at your call.

Respectfully submitted,

W. P. Garshwiler, M. D., Chairman.
J. H. Weinstein, M. D.
O. G. Brubaker, M. D.
H. L. Murdock, M. D.
D. H. Richards, M. D.

REPORT OF THE COMMITTEE ON LYE BURNS IN CHILDREN

House of Delegates, Indiana State Medical Association:

Gentlemen:

This committee has no report to make other than that progress is being made.

Respectfully submitted,

D. O. KEARBY, M. D., Chairman.
E. L. BULSON, M. D.
MATTHEW WINTERS, M. D.
O. D. HUTTO, M. D.

REPORT OF COMMITTEE ON STUDY OF PUERPERAL MORTALITY

House of Delegates, Indiana State Medical Association:

Gentlemen:

The Committee on the Study of Puerperal Mortality reports no appreciable change in puerperal mortality in Indiana during the past year.

No sudden changes in death rates can be expected in child birth statistics, but gradual improvement can be obtained in time if the public and the physicians will but take advantage of present day advances in obstetrical care.

Our efforts this year have been principally directed to the profession.

In some county societies a committee on maternal welfare already exists. An effort has been made to influence each county society to maintain a like committee of one or more members whose purpose would be to further obstetrical interests in their respective counties.

To each county society was sent a copy of Children's Bureau Publication No. 223—"Maternal Mortality in Fifteen States." This material was purchased for your committee by the State Division of Public Health. With each copy was sent a letter urging the discussion of this report in the local society.

Through the courtesy of the obstetrical staff of the Indiana University School of Medicine, we are privileged to announce an opportunity for any physician of the state to attend any of the various obstetrical features of the school at any time. This includes prenatal, delivery, post natal clinics, or lectures.

The above named staff offered also to supply speakers for local societies on short notice if necessary. This service is available by notifying the head of the department, stating preference of subject, dystocia, toxemia, or economic.

A study was made of the organization and plans of the American Committee on Maternal Welfare. Further consideration should be made before any recommendations can be formulated.

The problems concerned in puerperal mortality are many and complex. Constant endeavor should be made by the profession in the effort to reduce the risks in reproduction. To this end we recommend that the Indiana State Medical Association continue such study.

Respectfully submitted,

E. O. ASHER, M. D., Chairman.
L. H. ALLEN, M. D.
R. W. SHANKS, M. D.
ROSS COOPER, M. D.
J. H. CROWDER, M. D.

REPORT OF COMMITTEE ON STATE FAIR

House of Delegates, Indiana State Medical Association:

Gentlemen:

The third annual state fair exhibit of the Indiana State Medical Association and the American Medical Association attracted a crowd which has broken all records to date: 64,193 people viewed the exhibit during the week.

One feature was the instrument used in the determination of hyperactive goiter. This machine was constructed under the direction of an Indianapolis physician and based on investigations carried out by an English scientist. It is hoped that the instrument will offer a quick, simple method of testing without the usual preliminary fasting and rest. Examinations were made of 786 persons, details of which examinations are reported on page 546.

A display on heart disease and one on the common cold were shown, and *Hygeia*, the health magazine of the American Medical Association, was displayed and samples were distributed.

A physician, two medical students, and a nurse were on duty at all times. The interest shown was greater than at any previous display.

Respectfully submitted,

RUSSELL SAGE, M. D., Chairman.
T. B. RICE, M. D.
J. E. FERRELL, M. D.
J. H. CLEVENGER, M. D.
W. V. WOODS, M. D.
JAMES F. BALCH, M. D.
W. J. FUSON, M. D.
GORDON BATMAN, M. D.

REPORT OF COMMITTEE ON MENTAL HEALTH

House of Delegates, Indiana State Medical Association:

Gentlemen:

During the past year the Committee on Mental Health of the Indiana State Medical Association has had no specific problems for consideration and recommendation. It was planned to hold a midwinter meeting, but in view of the fact that there was no special business to transact and because of the geographic location of the committee members, it was considered impractical.

A meeting was held in Indianapolis, October, 1934, in connection with the session of the State

Association. At this time Dr. Schillinger, of the Eastern State Hospital, Richmond, Ind., reported that his institution was trying out, in a modified form, the plan proposed by Dr. Max Bahr in 1934 and described in our report of last year.

During the past year there have been no major changes in our state or municipal institutions for the care of the mentally ill. There is some fear that on account of lack of funds it may be necessary to discontinue the psychopathic ward at the Indianapolis City Hospital. This would be a serious matter, both from a medical and humanitarian standpoint, as it would necessitate incarceration in the county jail of mild, curable mental conditions and those awaiting commitment to the state hospital.

We are still beset with the problem of treating a large group of patients needing institutional care, but who are not indigent and who are not financially able to meet the necessary expense of private sanitaria. In other words, the great mass of the middle classes come in this group. There seems to be no solution of this problem. The only answer we see is that of privately endowed institutions in which adequate care can be received at a minimum cost.

The training of medical students and nurses in the field of psychiatry continues as in the past. We feel it is adequate. As previously stated, we feel that psychiatry is a highly specialized branch of medicine and at all times should be under the control of the medical profession. We disapprove of any efforts on the part of lay organizations to usurp these, our proper duties.

This committee is always at your service and anxious to investigate and consider any problems referred to it.

Respectfully submitted,

L. D. Carter, M. D., Chairman.
John H. Hare, M. D.
L. E. Pennington, M. D.

REPORT OF COMMITTEE ON EXPERT TESTIMONY

House of Delegates, Indiana State Medical Association:

Gentlemen:

This committee has given a great deal of time and thought to the problems here involved, and has at this time no definite recommendations to make with the exception of the statement as to the present status of court proceedings.

It is the unanimous opinion of the committee that this committee or a similar committee be continued for another year to allow for more time and thought for the problems involved in this matter.

SUGGESTIONS FOR REFORM RELATIVE TO THE MATTER OF EXPERT TESTIMONY

One of the objects of this committee was to inquire into the relations of psychiatry to the administration of criminal law, more especially into the problems of expert testimony as it involves the mental state of the defendant in criminal proceedings. To do this it was necessary to extend the discussion considerably beyond these limits in order properly to surround the subject and gain that depth of understanding which is necessary before a plan of betterment can be suggested with any prospect that it will prove practical. The origins, meanings and tendencies of the factors involved must be known so that such a plan may be constructed which will harmonize with them and follow along the lines of development and evolution to which they point.

Much has been written on this subject, but the general upshot of it all has been quite unsatisfactory, for although it is widely appreciated that present practices leave much to be desired there has been very little progress made toward practical suggestions for improvement. The poverty of results from such wide discussions seems, at least in part, to be due to a failure to grasp adequately all of the elements involved and to give them their proper values. There exists a marked discrepancy between the knowledge of man and his motives to which science has attained in recent years, and the concepts which have governed legislative bodies which have formulated the law and the judges who have interpreted it. Movements in many directions, however, indicate that the time is perhaps ripe for a general survey of the situation and the formulation of certain principles, and practical suggestions growing out of such survey which will be of value in effecting a new orientation toward the problems involved.

In a few words, the situation as it exists today is as follows: An individual is indicted for a criminal offense and brought to trial; a plea of irresponsibility because of insanity is entered and this plea is supported by introducing one or more expert witnesses who testify to the insanity of the defendant; the prosecution then counters by the introduction of medical expert testimony to prove the contrary. The general result of such a procedure is, unless some one of the experts is able to dominate the situation, that the two groups of alienists offset each other's testimony and, largely because the examination and cross-examination results in a confusing mass of technical details which the jury are unable to evaluate, the jury disregards the whole mass of expert evidence. In addition to this result, the medical witness is apt to be discredited because it is felt that he is a partisan attempting to make delivery of goods which have been purchased and paid for. Such a state of affairs brings discredit alike to the medical and the legal professions: to the former for the reasons given, to the latter because of the perpetuation of a practice which makes such results inevitable.

This general discrediting of the expert and expert evidence has produced some rather strange

results when viewed in the light of the facts. It has been pretty widely assumed that insanity was used very frequently as a plea to save the criminal when all other means failed, and the "insanity dodge" has come into existence by the popular consent as a symbol of sharp practice by unscrupulous attorneys and none too honest medical men. The facts can be best stated as follows: First, very seldom does a criminal ever escape conviction on the plea of insanity where the evidence did not warrant such a verdict, excepting in such cases in which the jury brought in a verdict of "unsound mind" for the specific purpose of exonerating a defendant who was obviously technically guilty. The jury in such cases is not fooled but intentionally make use of a plea in order to permit a defendant to escape the consequences of his act, finding themselves in sympathy either with the act as such or with the defendant who committed it because of the peculiar circumstances of the situation. Second: It is not the experience of those who have charge of institutions for the insane to find that patients are sent to them from the courts who have been found "not guilty" because of "insanity" but who are in fact not suffering from mental disease. Thirdly: Upwards of fifty per cent of the criminals who are convicted and sent to prison are, upon arrival, suffering from some form of mental deficiency or psychosis which is obvious as a result of any well established and accepted method of examination. In other words, the error is in exactly the opposite direction from that popularly supposed. Not only do no criminals get off by the "insanity dodge" but over fifty per cent of those who are convicted are suffering from mental disease or deficiency.

What is the explanation of this distortion of the facts? The interpretation is this. Expert evidence as it now exists has fallen into disrepute, and is supposed to be dishonest or prejudiced. Now inasmuch as the "insanity dodge" as a means of escape from the legal consequences of crime is such a result as would naturally flow from such a dishonest situation, because of the original assumption of dishonesty, because the public is naturally arrayed against the criminal and wants to see him punished, because the expert evidence is largely unintelligible, and because the expert is treated as if he were a partisan, without dignity, and cross-examined as if he were biased and for the purpose of discrediting him; it is therefore, for all these reasons, that the popular idea of the "insanity dodge" has been able to assert itself and hold the field. The reason that the popular idea is so absolutely wrong is that expert evidence is, as a matter of fact, essentially and fundamentally honest. The facts demonstrate this fundamental honesty because they are just exactly the opposite of what would be expected to flow from a dishonest situation and precisely what would be expected if the situation were an honest one.

In order that this situation may be intelligently comprehended, it is necessary to know something of how it came about and the function which it is conceived to fulfill. This involves certain historical and sociological considerations. In order that it may be constructively criticized with a view to practical suggestions of betterment, it is necessary to inquire into the human motives which lie back of it and which furnish the drive that maintains it. This latter question will have much light thrown upon it if it is considered from the point of view of present-day psychology which has so much to say respecting motives and which teaches that it is necessary to go back of the obvious, to search beneath the surface if the real motives of conduct are to be disclosed. By studying the present situation, not as the terminal stage of a series of chronologically related events, each one of which was in turn only an end result conflicting motives, but as a manifestation of certain underlying motives which have come to different forms of expression in the course of historical development, it may be possible to determine the tendencies that are operative, for any effort to improve on existing conditions will succeed only to the degree in which it allies itself with the general direction in which development is taking place and so makes available the energies of the motives that are bringing it about.

The same comments made in this report in regard to expert alienists applies with equal force to experts in any other field of medicine where either criminal or civil problems are involved.

RESOLUTIONS

"*Resolved*, By the House of Delegates of the Indiana State Medical Association, That it recognizes the urgent need for remedial legislation and such change in court procedure as will correct the abuse of expert opinion evidence; approves the efforts of this Association and the Indiana Bar Association, and further be it

"*Resolved*, That the House of Delegates endorses the principle that in civic and criminal cases the court may appoint expert medical witnesses, who shall be paid out of public funds, and who may furnish a written report; and that the Indiana Medical Association offers its cooperation by such means as lie in its power to promote such legislation as will be mutually satisfactory to the medical and legal professions toward the correction of the present unsatisfactory procedure of presenting expert opinion evidence, and the Indiana State Medical Association is hereby requested to use the facilities of this organization in such a way as to give effect to the sentiments expressed in this resolution.

"And further, that the House of Delegates endorses certain principles approved by the American Medical Association relative to this subject.

"That in civil and criminal cases where the issue of insanity is raised, expert medical witnesses

may be appointed by the court, and paid from public funds, and that such witnesses may present a written report.

"Be it further

"*Resolved*, That a copy of this resolution be sent to the Indiana State Bar Association."

It is further also resolved that this committee or a similar committee be continued for another year to permit of more time in consideration of this most important problem.

Respectfully submitted,

Max A. Bahr, M. D., Chairman.
E. O. Asher, M. D.
A. F. Knoefel, M. D.
W. F. Kelly, M. D.
Albert Stump, ex-officio.

REPORT OF COMMITTEE ON PREVENTION OF TRAFFIC ACCIDENTS

House of Delegates, Indiana State Medical Association:

Gentlemen:

The menace to health and life of the automobile can no longer be ignored by the medical profession, to whom the public looks for guidance in all matters pertaining to public health.

Deaths from automobile accidents are steadily increasing in Indiana, as elsewhere, having risen more than one hundred per cent in the ten-year period from 1923 to 1933. The number of such deaths in 1923 was 533, and in 1934 it was 1,227.

The death rate from automobile accidents is higher than the combined rates for typhoid fever, diphtheria, scarlet fever, puerperal septicemia, measles, whooping cough, and infant diarrhea, and is rapidly approaching the rate of tuberculosis. However, deaths are only a small part of the menace for deaths include no account of disabling injuries.

There are no accurate statistics of the number and character of non-fatal injuries. Such statistics would be of great value to all agencies interested in the prevention of automobile accidents.

It is the belief of the committee that the obtaining of such statistics can be accomplished through the department of health of the State of Indiana, and to this end we recommend that a committee be appointed to collaborate with the Division of Public Health for the purpose of devising ways and means to accomplish this purpose.

Respectfully submitted,

Murray N. Hadley, M. D., Chairman.
George Collett, M. D.
I. E. Huckleberry, M. D.

REPORT OF DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

House of Delegates, Indiana State Medical Association:

Gentlemen:

The report for delegates, prepared by Dr. H. G. Hamer, of Indianapolis, delegate to the Atlantic City session of the American Medical Association, was published on page 342 in the July, 1935, issue of The Journal.

REPORT OF THE STATISTICIAN

House of Delegates, Indiana State Medical Association:

Gentlemen:

Your statistician begs leave to report that seemingly the tremendous numbers of hypertrophied arithmetical figures and computations coming out of Washington have had a very sedative effect upon the desires of our members for statistical exercises in their own field. Therefore, I am forced to report that no demands have been made upon the statistician during the current year.

I believe that the only way in which this office may hope to compete with our political brethren would be to begin reporting actual bacterial counts per cubic centimeter, or square inch, etc., since those that may dance on the point of a needle would fall far short of what we are daily accustomed to in the way of numerical reports, taxes, etc.

Respectfully submitted,

A. W. Cavins, M. D., Statistician.

REPORT OF THE HISTORIAN

House of Delegates, Indiana State Medical Association:

Gentlemen:

The historical activities of this last year have afforded me much pleasure, and I trust that the information which has been collected from various sources during the course of the year and published as special articles under the title of *Indiana Medicine in Retrospect* has, too, been of some interest to you.

The articles published thus far have had to do with those physicians associated with Transylvania University, who either attended lectures or received degrees from that institution. While the Transylvania group of men represent only one division of the entire study, it is necessary to exhaust one subject as nearly as possible before going to the next.

It is my belief that the activities of each individual physician should be studied and recorded not only from a professional point of view, but including those phases of his life pertaining to the community in which he lived. From these many details, facts instead of fancies may be sum-

marized, so that when such facts are compiled in a general way, a rather clear concept of medical history in Indiana may be reached. It is hoped eventually that the special articles which have appeared in *The Journal of the Indiana State Medical Association* may be boiled down still further to a point of getting the essence out of each study.

Since the report of last year all of the photographs of the past presidents of the Indiana State Medical Association have been acquired, copies made from them, and framed. I wish to thank Miss Louise Woodbridge for the persistent manner in which she has worked in doing what seemed to be at the time an impossible task. Work is in progress relative to completing the biographical sketches of these men.

Since the establishing of a separate office for the state historian, the work has been greatly facilitated. I might say that the interest which has been shown by the various physicians to whom we have addressed letters of inquiry, those secretaries of county societies who have been so co-operative in sending on various records of their societies, and those physicians in general, in the state, who have supplied us with available information, photographs, clippings, etc., is deserving of our sincere thanks.

Respectfully submitted,

L. G. ZERFAS, M. D., Historian.

CORRECTIONS TO CONSTITUTION AND BY-LAWS

The Constitution and By-Laws as printed in the September issue of THE JOURNAL was the original adoption of the Codification Committee. The following is the printing of the subsequent changes effected by the report of the Reference Committee on Constitution and By-Laws, and the adoption of the amendments creating a new section on anesthesia, at the Indianapolis session:

Original paragraphs which are to be replaced are inclosed in parentheses.

Constitution:

ARTICLE VI.—COUNCIL

(The Council shall consist of (1) the Councilors, and (2) *ex officio* the President, President-elect, Executive Secretary, and Treasurer. Besides its duties mentioned in the By-Laws, it shall constitute the Board of Trustees of this organization, having full charge and control of all the property of the Association. It shall have full authority and power of the House of Delegates between sessions of the House of Delegates and at all times shall be the finance committee of the Association. Five Councilors shall constitute a quorum.)

The Council shall consist of (1) the Councilors, and (2) *ex officio* the President, President-elect, Executive Secretary, and Treasurer. Besides its duties mentioned in the By-Laws, it shall constitute the Board of Trustees of this organization, having full charge and control of all the property of the Association. It shall have full authority and power of the House of Delegates between sessions of the House of Delegates, except that it shall not make changes in the laws governing the Association nor exercise legislative functions, except as stated in the By-Laws, and at all times shall be the finance committee of the Association. Five Councilors shall constitute a quorum.

ARTICLE IX.—OFFICERS

(SECTION 1.—The officers of this Association shall be a President, a President-elect, an Executive Secretary, a Treasurer, and thirteen Councilors.)

SECTION 1.—The officers of this Association shall be a President, a President-elect, an Executive Secretary, a Treasurer, and thirteen Councilors, each of whom shall be a member, except the Executive Secretary, who need not necessarily be either a physician or a member.

By-Laws:

CHAPTER III.—SECTIONS

(SECTION 1.—During the Annual Session the Association may meet in the following sections:

a. Surgical.
b. Medical.
c. Eye, Ear, Nose, and Throat.
d. Any other sections that hereafter may be provided for by the House of Delegates.)

SECTION 1.—During the Annual Session the Association may meet in the following sections:

a. Surgical.
b. Medical.
c. Eye, Ear, Nose, and Throat.
d. Anesthesia.
e. Any other sections that hereafter may be provided for by the House of Delegates.

CHAPTER XII

(SEC. 16.—Medical defense as provided for by this Association shall be available to members under the terms stated in these By-Laws only to the defense of civil action for alleged malpractice,

SEC. 16.—Medical defense as provided for by this Association shall be available to members under the terms stated in these By-Laws only in the defense of civil action for alleged malpractice, and shall not be available if such alleged malpractice occurred when the member was under the influence of any intoxicant or narcotic while rendering the service in question.

DELEGATES TO THE INDIANA STATE MEDICAL ASSOCIATION, GARY—1935

County	Delegate	Alternate
Adams	Ben E. Duke, Decatur	
Allen	M. R. Lohman, Ft. Wayne	E. R. Carlo, Ft. Wayne
	W. C. Wright, Ft. Wayne	D. W. Schafer, Ft. Wayne
	J. L. Wyatt, Ft. Wayne	M. B. Catlett, Ft. Wayne
Bartholomew		
Benton	V. L. Turley, Fowler	D. E. Mavity, Fowler
Boone		
Carroll	C. C. Crampton, Delphi	Hubert Gros, Delphi

County	Delegate	Alternate
Cass	W. W. Holmes, Logansport	
Clark		
Clay	P. H. Veach, Staunton	J. F. Maurer, Brazil
Clinton	M. F. Boulden, Frankfort	
Crawford		
Daviess-Martin		
Dearborn-Ohio	O. H. Stewart, Aurora	J. C. Elliott, Guilford
Decatur		
Dekalb	M. E. Klingler, Garrett	W. W. Swarts, Auburn
Delaware-Blackford	T. R. Owens, Muncie	E. H. Clauser, Muncie
Dubois		
Elkhart	A. C. Yoder, Goshen	D. D. Todd, Elkhart
Fayette-Franklin	Ralph Sappenfield, Brookville	H. W. Smith, Brookville E. M. Glaser, Brookville
Floyd	P. H. Schoen, New Albany	Wm. Windstandley, New Albany
Fountain-Warren	Simeon Lambright, Covington	A. L. Spinning, Covington
Fulton	C. L. Richardson, Rochester	M. O. King, Rochester
Gibson	Carl Clark, Oakland City	M. L. Arthur, Patoka
Grant	V. V. Cameron, Marion	B. C. Dale, Marion
Greene	S. I. Rotman, Jasonville	H. B. Turner, Bloomfield
Hamilton	J. D. Sturdevant, Noblesville	H. C. Kraft, Noblesville
Hancock		
Harrison	W. E. Amy, Corydon	
Hendricks	O. T. Scamahorn, Pittsboro	Carl B. Parker, Danville
Henry	Walter M. Stout, Newcastle	C. E. Canaday, Newcastle
Howard		
Huntington	J. M. Hicks, Huntington*	Robert D. Meiser, Huntington
Jackson	C. H. Ruch, Brownstown	E. E. Schriefer, Seymour
Jasper-Newton	A. R. Kresler, Rensselaer	Merle Gwin, Rensselaer
Jay	B. M. Taylor, Portland	G. V. Cring, Portland
Jefferson	George A. May, Madison	Anna Goss, Madison
Jennings	W. L. Grossman, North Vernon	D. W. Matthews, North Vernon
Johnson		
Knox		
Kosciusko	T. S. Schuldt, Pierceton	C. E. Thomas, Leesburg
Lagrange	W. O. Hildebrand, Topeka	Harry Irwin, Lagrange
Lake	H. G. Cole, Hammond	T. W. Oberlin, Hammond
	J. R. Pugh, Hammond	H. J. White, Hammond
	F. J. McMichael, Gary	R. N. Bills, Gary
	J. M. White, Gary	T. J. Smith, Whiting
LaPorte	Jon Kelly, LaPorte	J. B. Rogers, Michigan City
Lawrence	Morrell Simpson, Bedford	Frank D. Martin, Bedford
Madison	J. R. Tracy, Anderson	Sam Litzenberger, Anderson
Marion	H. S. Leonard, Indianapolis	P. E. McCown, Indianapolis
	Ben Moore, Indianapolis	J. K. Berman, Indianapolis
	O. W. Sicks, Indianapolis	C. A. Stayton, Indianapolis
	Roy Lee Smith, Indianapolis	Howard Mettel, Indianapolis
	R. H. Moser, Indianapolis	Wm. E. Gabe, Indianapolis
	W. F. Kelly, Indianapolis	Harry L. Foreman, Indianapolis
	C. J. Clark, Indianapolis	Elmer Funkhouser, Indianapolis
	E. O. Asher, New Augusta	H. J. Weil, Indianapolis
	Max A. Bahr, Indianapolis	J. M. Whitehead, Indianapolis
	H. G. Morgan, Indianapolis	H. K. Langdon, Indianapolis
Marshall	T. C. Eley, Plymouth	
Miami		
Monroe		
Montgomery	T. Z. Ball, Crawfordsville	A. S. Faulkner, Waynetown
Morgan	Leon Gray, Martinsville	Austin Sweet, Martinsville
Noble	J. W. Morr, Albion	W. F. Carver, Albion
Orange	George Dillinger, French Lick	S. F. Teaford, Paoli
Owen	M. S. Brown, Spencer	
Parke-Vermillion	S. C. Darroch, Cayuga	F. G. Greene, Bloomingdale
Perry	David A. Dukes, Tell City	D. S. Conner, Cannelton
Pike		
Porter	F. J. Kleinman, Hebron	J. C. Brown, Valparaiso
Posey	W. B. Challman, Mount Vernon	Paul Boren, Poseyville
Pulaski		
Putnam	V. Earle Wiseman, Greencastle	G. D. Rhea, Greencastle
Randolph	Russell Engle, Farmland	J. S. Robison, Winchester
Ripley	Arthur Whitlatch, Milan	M. J. Coomes, Osgood
Rush	C. C. Atkins, Rushville	R. Shanks, Rushville
St. Joseph	A. S. Giordano, South Bend	H. D. Pyle, South Bend
	M. D. Wygant, Mishawaka	G. M. Rosenheimer, South Bend
	P. J. Birmingham, South Bend	J. L. Wilson, South Bend
Scott		
Shelby		
Spencer		
Steuben	W. F. Waller, Angola	S. S. Frazier, Angola
Sullivan	J. T. Oliphant, Farmersburg	
Switzerland	M. F. Daubenheyer, Patriot	L. H. Bear, Vevay
Tippecanoe	Earl Van Reed, Lafayette	O. L. McCay, Romney
	G. A. Thomas, Lafayette	R. R. Calvert, Lafayette
Tipton	B. V. Chance, Windfall	Boyd Burkhardt, Tipton
Vanderburgh	Herman Baker, Evansville	A. M. Hayden, Evansville
	Louis Fritsch, Evansville	Gardner Johnson, Evansville
Vigo	O. R. Spigler, Terre Haute	E. O. Nay, Terre Haute
	A. W. Cavins, Terre Haute	R. G. Harkness, Terre Haute
Wabash	O. G. Brubaker, No. Manchester	
Warrick		
Washington		
Wayne-Union	Will Thompson, Liberty	M. F. Johnston, Richmond
Wells	O. G. Hamilton, Bluffton	H. D. Caylor, Bluffton
White		
Whitley	Paul A. Garber, South Whitley	B. F. Pence, Columbia City

LIST OF PRESIDENTS OF THE INDIANA STATE MEDICAL ASSOCIATION SINCE ITS ORGANIZATION

Name and Residence	*Elected*	*Served*
Livingston Dunlap, Indianapolis	1849	1849
William T. S. Cornett, Versailles	1849	1850
Asahel Clapp, New Albany	1850	1851
George W. Mears, Indianapolis	1851	1852
Jeremiah H. Brower, Lawrenceburg	1852	1853
Elizur H. Deming, Lafayette	1853	1854
Madison J. Bray, Evansville	1854	1855
William Lomax, Marion	1855	1856
Daniel Meeker, LaPorte	1856	1857
Talbott Bullard, Indianapolis	1857	1858
Nathan Johnson, Cambridge City	1858	1859
David Hutchinson, Mooresville	1859	1860
Benjamin S. Woodworth, Fort Wayne	1860	1861
Theophilus Parvin, Indianapolis	1861	1862
James F. Hibberd, Richmond	1862	1863
John Sloan, New Albany	1863	1864
John Moffet (acting), Rushville	1864	1864
Samuel M. Linton, Columbus	1864	1864
Myron H. Harding, Lawrenceburg	1865	1865
Wilson Lockhart (acting), Danville	1865	1866
Vierling Kersey, Richmond	1866	1867
John S. Bobbs, Indianapolis	1867	1868
Nathaniel Field, Jeffersonville	1868	1869
George Sutton, Aurora	1869	1870
Robert N. Todd, Indianapolis	1870	1871
Henry P. Ayres, Fort Wayne	1871	1872
Joel Pennington, Milton	1872	1873
Isaac Casselberry, Evansville	1873	1874
Wilson Hobbs, Knightstown	1873	1874
Richard E. Haughton, Richmond	1874	1875
John H. Helm, Peru	1875	1876
Samuel S. Boyd, Dublin	1876	1877
Luther D. Waterman, Indianapolis	1877	1878
Louis Humphreys, South Bend	1878	....
Benj. Newland (acting) Bedford (v.-p.)	1878	1879
Jacob R. Weist, Richmond	1879	1880
Thomas B. Harvey, Indianapolis	1880	1881
Marshall Sexton, Rushville	1881	1882
William H. Bell, Logansport	1882	1883
Samuel E. Munford, Princeton	1883	1884
James H. Woodburn, Indianapolis	1884	1885
James S. Gregg, Fort Wayne	1885	1886
General W. H. Kemper, Muncie	1886	1887
Samuel H. Charlton, Seymour	1887	1888
William H. Wishard, Indianapolis	1888	1889
James D. Gatch, Lawrenceburg	1889	1890
Gonsolvo C. Smythe, Greencastle	1890	1891
Edwin Walker, Evansville	1891	1892
George F. Beasley, Lafayette	1892	1893
Charles A. Daugherty, South Bend	1893	1894
Elijah S. Elder, Indianapolis	1894	1895
Charles S. Bond (acting), Richmond	1894	1895
Miles F. Porter, Fort Wayne	1895	1896
James H. Ford, Wahash	1896	1897
William N. Wishard, Indianapolis	1897	1898
John C. Sexton, Rushville	1898	1899
Walker Schell, Terre Haute	1899	1900
George W. McCaskey, Fort Wayne	1900	1901
Alembert W. Brayton, Indianapolis	1901	1902
John B. Berteling, South Bend	1902	1903
Jonas Stewart, Anderson	1903	1904
George T. MacCoy, Columbus	1904	1905
George H. Grant, Richmond	1905	1906
George J. Cook, Indianapolis	1906	1907
David C. Peyton, Jeffersonville	1907	1908
George D. Kahlo, French Lick	1908	1909
Thomas C. Kennedy, Shelbyville	1909	1910
Frederic C. Heath, Indianapolis	1910	1911
William F. Howat, Hammond	1911	1912
A. C. Kimherlin, Indianapolis	1912	1913
John P. Salb, Jasper	1913	1914
Frank B. Wynn, Indianapolis	1914	1915

George F. Keiper, Lafayette	1915	1916
John H. Oliver, Indianapolis	1916	1917
Joseph Rilus Eastman, Indianapolis	1917	1918
William H. Stemm, North Vernon	1918	1919
Charles H. McCully, Logansport	1919	1920
David Ross, Indianapolis	1920	1921
William R. Davidson, Evansville	1921	1922
Charles H. Good, Huntington	1922	1923
Samuel E. Earp, Indianapolis	1923	1924
E. M. Shanklin, Hammond	1924	1925
C. N. Combs, Terre Haute	1925	1926
Frank W. Gregor, Indianapolis	1926	1927
George R. Daniels, Marion	1926	1928
Charles E. Gillespie, Seymour	1927	1929
Angus C. McDonald, Warsaw	1928	1930
Alois B. Graham, Indianapolis	1929	1931
Franklin Smith Crockett, Lafayette	1930	1932
Joseph H. Weinstein, Terre Haute	1931	1933
Everett E. Padgett, Indianapolis	1932	1934
Walter J. Leach, New Albany	1933	1935

EXHIBITORS 1935 SESSION

Booth No.

1 Lepel High Frequency Laboratories..New York, N. Y.
2 Gerber Products Company..Fremont, Mich.
3 Horlick's Malted Milk Corp.....Racine, Wisc.
4 Philip Morris and Co., Ltd.....New York, N. Y.
5 Akron Surgical House.....Indianapolis
6 W. D. Allison Co.....Indianapolis
7 H. J. Heinz Co.....Pittsburgh
8 Mellin's Food Company.....Boston
9 Lederle Laboratories, Inc.....New York, N. Y.
10–11 Frank S. Betz Company.....Hammond
12 Heidbrink Company .....Minneapolis
13 Medical Protective Company.....Wheaton, Ill.
14–15 Pitman-Moore Company.....Indianapolis
16 Bard-Parker Company, Inc.....Danbury, Conn.
17
18
19–20 Libby, McNeill and Libby.....Chicago
21 Petrolagar Laboratories, Inc.....Chicago
22 W. B. Saunders Company....Philadelphia
23 Merck and Co., Inc.....Rahway, N. J.
24 Mead Johnson and Co.....Evansville, Ind.
25 The Dry Milk Co., Inc....New York, N. Y.
26 A. S. Aloe Company.....St. Louis, Mo.

Booth No. 1—Lepel High Frequency Laboratories New York City

A feature of the Lepel Exhibit at Booth No. 1 will be the new Lepel Mobile and Portable Ultra-Short Wave machines for deep seated thermal effects. These models are so designed that the full energy output of the machine is available through very small condenser electrodes when air spaced one inch from the body . . . a necessary procedure when depth effects are required. Another advantage is the fact that super-quenched fixed spark gaps eliminate the expensive tube replacements necessary in tube operated machines, and assure a more constant output of ultra-high frequency energy.

The mobile model embodies circuits for cutting, coagulation and desiccation, and will also operate the Lepel Quartz-Mercury Ultra Violet Body Lamp and "cold" Orificial Ultra-Violet Burner.

Every doctor interested in the latest advances in physical therapy should make it a point to visit the Lepel display, which will feature a complete line of highly efficient mobile and portable electro-therapeutic units designed to meet every requirement.

Mr. O. M. Randall will be in charge of the booth.

Booth No. 2—Gerber Products Company Fremont, Michigan

Gerber's revolutionary new process of Shaker-cooking of their strained foods will be explained and the foods demonstrated at Booth No. 2 at the meeting of the Indiana State Medical Association. By this new method the contents of the center of the can reach the temperature necessary for adequate sterilization in from one-fourth to one-third less time than necessary by the usual canning procedure.

The new method of Shaker-cooking, for which we have applied for patents, does away with over-cooking and with uneven cooking, by continuous shaking during the cooking. This method accomplishes the same thing as stirring in home cooking, thus distributing the heat uniformly and shortening the cooking time considerably.

Charts showing the heat penetration into the can and illustrations of the equipment, with open samples of the food, will be on display at the Gerber booth. Booklets and leaflets are available. Some of these publications are suitable for distribution by physicians while some are for professional use only.

Booth No. 3—Horlick's Malted Milk Corporation Racine, Wisconsin

Horlick's Malted Milk Corporation, in Booth No. 3, will explain the special uses of Horlick's Malted Milk, natural and chocolate flavors, as a food of remarkably nutritive and digestible qualities, both in sickness and in health. Samples of Horlick's Malted Milk Tablets will be distributed as a reminder of their usefulness as a pleasing variant in the liquid diet, and as a beneficial confection for children.

Dr. G. A. Glasgow will be in charge of this exhibit.

Booth No. 4—Philip Morris and Company, Ltd. New York City

Philip Morris and Company, Ltd., Inc., manufacturers of Philip Morris cigarettes, has been studying the effects of smoking on irritation of the mucous membrane of the upper respiratory tract. In the booth one of its research staff will be available to explain the work and the results obtained. Samples of Philip Morris cigarettes will be distributed.

Booth No. 6—W. D. Allison Company Indianapolis

The W. D. Allison Company will have on display, in booth No. 6, representative pieces of their three most popular lines: the "Directoire," the "Metropolitan," and the "Moderne."

The "Directoire" and "Moderne" were introduced to the profession for the first time at the A. M. A. meeting held in Atlantic City. The reception these new lines received was far beyond the expectations of the Company, and they feel sure that the Indiana physicians, who did not have the opportunity to see this fine furniture at Atlantic City, will be glad of the chance to inspect it at their state meeting.

Mr. G. D. French will be in charge of the display and will be glad to explain in detail all the features of ALLISON furniture.

Booth No. 7—H. J. Heinz Company Pittsburgh, Pa.

H. J. Heinz Company, creators of the famous 57 Varieties of pure food, will display strained foods, tomato juice, and breakfast cereals especially suited to infant feeding and diet therapy.

Do not fail to register for the Heinz Nutritional charts, a set of reference charts invaluable to the physician in diet planning.

Booth No. 8—Mellin's Food Company Boston, Massachusetts

Since the adjustment of the diet for babies deprived of human milk must always be of interest to physicians, the Mellin's Food Company will set before physicians the basic principles of Mellin's Food, with the sincere belief that the evidence accumulated from long experience fully justifies the recognition of the value of Mellin's Food as a modifier of milk in infant feeding. Physicians are cordially invited to visit Booth No. 8.

Booth No. 9—The Lederle Laboratories, Inc. New York, N. Y.

The Lederle Laboratories, Inc., of New York, will especially feature the new 1 cc. Concentrated Solution Liver Extract Parenteral. Each 1 cc. contains the anti-anemic material from 100 grams of liver. This is the most concentrated preparation that is available. It is of particular value for patients who have suffered severely from pernicious anemia, where pain has accompanied the injections previously, due to the volume of liquid in which the required potency is contained.

Staphylococcus Toxoid for staphylococcic infections will also be given consideration, as well as new developments in the refinement of antitoxins.

An entire new set-up will be featured, and physicians will be welcome when their problems can be given detailed consideration.

Booths Nos. 10 and 11—Frank S. Betz Company Hammond, Indiana

The Frank S. Betz Company will display in Booths Nos. 10 and 11 the new eight piece BETZ Moderne Straight Line Office Group; also the Majestic Portable Surgical Unit will be on demonstration with an expert operator in charge. This unit provides cutting equal or equivalent to any of the so-called radio knives, except for heavy duty work. Do not fail to have our operator demonstrate this outfit for you.

In addition to the above, we will have on display our new electric centrifuge and a complete line of surgical instruments.

Mr. E. W. Schopp, Mr. J. J. Brom, Mr. L. W. Deus, and Mr. W. C. Schmidt will attend the convention.

Booth No. 12—The Heidbrink Company Minneapolis, Minnesota

The Heidbrink Company will put on display the latest models of their gas anesthesia machines and their oxygen therapy equipment. Prominent in this display will be the Kinetometer with its new double-chamber absorber, which was shown for the first time at the American Medical Association meeting in Atlantic City in June. This double-chamber absorber represents a distinct advantage in this type of equipment. It provides an emergency supply of soda lime so that there is never any danger of running out of this material which is so important to the technique.

The Heidbrink Kinetometer, although it is quite extensively used among the hospitals of Indiana, is being displayed before the Indiana State Medical Association for the first time. The display will be in charge of Mr. Earl H. Clark, who is a competent anesthetist and who will be glad to demonstrate the equipment itself or to discuss anesthesia problems with those who are interested.

Booth No. 13—Medical Protective Company Wheaton, Illinois

At Booth No. 13 is represented a device which at some time in your practice may be to you a necessary auxiliary to any product offered in the commercial exhibit; any medium or method presented in the scientific exhibit; to any teaching of clinic or scientific session. There will be in attendance representatives of The Medical Protective Company, who understand the liability hazards of the physician's practice and who will welcome the opportunity to explain the features of the specialized service developed by that Company.

Booths Nos. 14 and 15—Pitman-Moore Co. Indianapolis

Colorful, interesting, instructive is the exhibit of Pitman-Moore Company, Indianapolis. On one side a full sized replica of a medieval drug store displays such wares as a snake for use in compounding Theriac, an owl for the treatment of Pertussis, and other concoctions which, for weirdness, must be seen to be appreciated. Across from this is a corner of a modern laboratory displaying processes and products in the manufacture of present-day pharmaceuticals and biologics. The whole is dominated by a mammoth reproduction of the cover of a booklet, "Ye Olde and the New in the Prevention and Treatment of Disease." Twelve of these books, quaint and informative, will be mailed to each physician registering at the booth.

Booth No. 16—Bard-Parker Company, Inc. Danbury, Conn.

The Bard-Parker exhibit, in Booth No. 16, will include a complete line of Detachable Blade knives, Renewable Edge scissors and Lahey Lock forceps as well as a Germicide and Sterilizing Container for instrument sterilization. Included in the knife exhibit are the new Rib-Back blades, an outstanding improvement in design and construction over the old flat blades.

The representative in attendance will be Mr. H. J. Bellesheim.

Booths No. 19 and 20—Libby, McNeill and Libby Chicago, Illinois

The most outstanding recent development in the science of infant feeding—Libby's Homogenized Foods. This new process mechanically ruptures the food cells of vegetables.

fruits, and cereals, refines the cellulose tissue, releases the contained nutriment, and makes these foods more easy to digest and more completely assimilated. Photomicrographs of strained and homogenized foods graphically illustrate the advantages of the newer process. The Research Laboratories of Libby, McNeill and Libby invite you to inspect their display in booths numbered 19 and 20.

Mr. J. C. Wilson will be in attendance.

Booth No. 21—Petrolagar Laboratories, Inc. Chicago

There are now five types of Petrolagar, each of which serves a special purpose.

To enable the physician to fit the treatment to the particular need of the patient, these five types of Petrolagar afford a range of laxative potency which will meet practically every requirement of successful bowel management.

Petrolagar is a mechanical emulsion of liquid petrolatum (65% by volume) and agar-agar, deliciously flavored and pleasant to take. It does not upset digestion, mixes easily with the intestinal content, acts as unabsorbable moisture and has less tendency to leakage. Petrolagar is the original oil and agar emulsion accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

Samples of the five types of Petrolagar may be obtained at Booth No. 21.

Representatives who will attend are W. W. Mink and Dr. M. Goldwater.

Booth No. 22—W. B. Saunders Company Philadelphia and London

These publishers will exhibit their complete line of medical books. Of particular interest are a great number of new books and new editions, including Eusterman and Balfour's Stomach and Duodenum, Rice's Applied Bacteriology, Hinman's Urology, New Series of the Medical Clinics of North America and of the Surgical Clinics of North America, Kitchens' Diagnosis in General Practice, Curtis' fine three-volume work on Obstetrics and Gynecology, Bickham's seven-volume work on Operative Surgery, Callander's Surgical Anatomy; new (1935) Mayo Clinic Volume; advance proofs of Berens' Eye Diseases; new editions of the American Illustrated Medical Dictionary, Wechsler's Clinical Neurology, Todd and Sanford's Clinical Diagnosis by Laboratory Methods, Beckman's Treatment in General Practice, Babcock's Surgery, Jordan's Bacteriology, Ranson's Neuro-Anatomy, and many others.

Booth No. 23—Merck and Company, Inc. Rahway, New Jersey

Tryparsamide Merck, the chemotherapeutic agent of choice for the treatment of neurosyphilis, is supplied in 1, 2, and 3 gram ampuls of the crystalline powder, ready for dissolving in sterile distilled water for intravenous injection. Information relative to the use of this remedy may be obtained at the Merck Exhibit. Statistics indicate that some 33 per cent of patients with early syphilis have central nervous system involvement during the first two years of the disease. Prompt diagnosis of this involvement is essential to prevent the dire results that may appear in later life. Visit the Merck Exhibit for comprehensive literature of clinical experience with Tryparsamide Merck, together with reprints of published reports.

Dr. M. V. Burgett will be in attendance during the session.

Booth No. 24—Mead Johnson and Company Evansville, Indiana

Mead Johnson and Company will have on exhibit its complete line of infant diet materials including Dextri-Maltose Nos. 1, 2 and 3, Dextri-Maltose with Vitamin B, Mead's Standardized Cod Liver Oil, Mead's Viosterol in Oil, Mead's Cod Liver Oil with Viosterol, Mead's Viosterol in Halibut Liver Oil (Liquid and capsules), Mead's Halibut Liver Oil, Mead's Brewers Yeast (tablets and powder), Pablum, Mead's Cereal, Sobee, Mead's Powdered Protein Milk, Mead's Powdered Lactic Acid Milk Nos. 1 and 2, Mead's Powdered Whole Milk, Ajacta, Recolac and Casec.

There will also be for the examination of physicians a complete line of Mead's services such as "Diets for Children from Four Months to Four Years," height and weight charts, etc., all of which are free to members of the medical profession in any quantity desired.

Representatives will be on hand to meet their friends and to discuss the application of any of the Mead products to infant feeding problems.

Mr. P. G. Bicknell will be in charge.

Booth No. 25—Dry Milk Company, Inc. New York City

The Dry Milk Company, Inc., a division of the Borden Company, together with associated companies will occupy space 25. A qualified representative, George H. Wright, Ph.D., will be in constant attendance to greet physicians. Of particular interest will be the new "Special" Dryco with added vitamin B complex, and National Beta Lactose, a Council-accepted Milk Sugar. Standard products such as Klim, regular Dryco, Merrell-Soule Milks and other Borden milk products, will be shown.

Booth No. 26—A. S. Aloe Company St. Louis

The A. S. Aloe Company Exhibit, in Booth No. 26, will show the complete Aloe line of surgical instruments. Features of the exhibit will be the Aloe Short Wave Diatherm and the Elliott Treatment Regulator.

Mr. Oldfather and Mr. Curtis, Aloe representatives in Indiana, will be in attendance to give you every service and handle your orders for all requirements.

GARY HOTELS AND RATES

Hotel	Rooms Available	Rates
Hotel Gary	275, all with bath	Single, $2.50 to $4.00 Double, $3.50 to $5.00 Twin beds, $5.00 to $6.00 Suites, $8.00 to $10.00
Hotel Roosevelt	35, all with bath	Single, $1.75 to $3.00 Double, $2.75 to $4.00 Twin beds, $4.00 to $4.50 Suites, $6.00
Hotel Victoria	20	Single, $1.00 Double, $1.50 Double with bath, $2.00
Hotel Washington	9	Single, $1.50 to $2.00 Double, $2.00 to $3.00
Hotel Lake	40	Rates not supplied.

THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION
DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

Office of Publication: 1021 Hume Mansur Bldg., Indianapolis.
Editor: E. M. Shanklin, M. D., 5141 Hohman Avenue, Hammond, Ind.
Managing Editor: Thomas A. Hendricks, 1021 Hume Mansur Building, Indianapolis
Editorial Board:
F. T. Romberger, M. D., Lafayette.
T. B. Rice, M. D., Indianapolis.
Pierce MacKenzie, M. D., Evansville.
L. P. Harshman, M. D., Fort Wayne.
Ernest Rupel, M. D., Inudianapolis.

OCTOBER, 1935

EDITORIALS

OUR PRESIDENT

Walter J. Leach, of New Albany, president of the Indiana State Medical Association this year, "Indiana's Dafoe" as we have named him, long has been an important figure in Indiana medicine.

Born at Sellersburg, Clark County, in 1862, Dr. Leach was educated in the public schools of that community, and later attended Louisville Medical College, from which he graduated with honors in 1897. He returned to Sellersburg where he practiced general medicine for several years, following which he took postgraduate work in his present specialty, eye, ear, nose and throat, in Chicago. During a period of five years he taught these subjects, together with physiology, in the Louisville Medical College. Later he did postgraduate work in Philadelphia, London, and Berlin.

Early in his medical career Walter Leach became identified with his local medical society and the Indiana State Medical Association. It has been said of him that he has been connected with the Association in one official capacity or another longer than any other living physician. He served as councilor in his district for a period of twenty-three years, and it is in this connection that the writer best knew him, for he made an enviable record as councilor; his advice was constantly sought in the council, both in and out of session, and he came to be regarded as one of the stalwarts. Thus it occasioned no wonder when, at French Lick in 1933, his host of friends elected him to the office of president of the most efficient and most enterprising state medical association in the land! Following this election he remarked, "I told the boys that I was afraid it would be a mistake to try to elect me but they went ahead and did it just the same. Now it is up to me to see if I can make good on the job." So, Walter Leach set himself about the task of making good, and an excellent job he has made of it. Possessed of a pleasing personality (such as can be obtained only by being a native Hoosier), he has endeared himself to his host of friends and, in his capacity as the head of the Indiana State Medical Association, he has added hundreds to that list of friends.

Thoroughly capable and efficient, Dr. Leach has carried on the multifarious duties of his office with a vim and vigor not common to a man of his years. Indeed, the office is one that many younger men might well hesitate to assume. Dr. Leach's activities were diminished for a time by a rather serious illness, but he is again among us and will conclude his term as he began it, filled with a desire to do things for his beloved Association.

Walter Leach leads an active and a useful life; he is a busy man, yet he has found time to cultivate the acquaintances and friendships he has made in his busy career, and it is fitting that he has had this opportunity to serve his fellow practitioners as their leader. We have thoroughly enjoyed knowing the man as we do; it has been a most stimulating friendship, and we repeat what we said of him in an earlier issue—the things we most admire about the man are his rugged individualism, his steadfastness of purpose, his high ideals, and withal, his endearing "commonness."

WITHDRAWAL OF FEDERAL INDIGENT SICK FUNDS

Federal funds for relief were to be withdrawn from Indiana on September 30 according to a statement issued by Wayne Coy, director of the Governor's Commission on Unemployment Relief. This means that county medical societies through their official representatives immediately should contact their township and county officials concerning the future status of payment for medical services rendered the indigent sick. Now is the time to act, not later, as from September 30 on, according to the interpretation placed upon Mr. Coy's statement, physicians will have to depend entirely upon township and county funds for remuneration for services rendered the indigent sick.

The communication in part by Mr. Coy to the township trustees announcing withdrawal of federal direct relief funds follows:

"The Governor's Commission on Unemployment Relief has been fully aware, of course, of the uncertainty which has prevailed among the township trustees of Indiana in regard to the continuance of the services of the commission in all townships of the state and the contribution of funds for direct relief in a portion of the town-

ships of the state, but until this time we have not been in a position to dispel this uncertainty. Now we are able to do so.

"Obviously, the plans of the Governor's Commission on Unemployment Relief for the future could not be formulated until assurance could be given for the employment of a large portion of those on relief through the jobs offered by the new works progress program. At the end of August 25,000 men and women, taken from the public relief rolls, had been employed under the WPA program. We are confident that by the middle of September this total will exceed 40,000 and that by the end of September it will exceed 60,000.

"With funds coming into Indiana in sufficient sums to provide for the employment of these people the Federal Emergency Relief Administrator, Mr. Harry L. Hopkins, has informed us that *the federal grant of money for relief in Indiana will be withdrawn at the end of September.* The auditor of the Governor's Commission reports that in the liquidation of relief activities of the state we will have a sufficient sum of money to carry on the program until September 30. Effective that date, it is necessary that the Governor's Commission on Unemployment Relief withdraw from the cooperative arrangement made with you, and that you as township trustee arrange to carry on all the functions of the overseer of the poor in your township.

"The members of the commission and the staff of the Governor's Commission on Unemployment Relief are ready at all times to act in an advisory capacity and to cooperate in any way possible with the township trustees of Indiana in connection with poor relief matters."

Notification of Mr. Coy's statement and the withdrawal of federal funds was sent to each local county medical society secretary on September 18.

SELF DRUGGING

Notwithstanding the frequently published reports concerning the dangers attending the use of dinitrophenol as a reducing agent, it seems that the unrestricted sale of this highly potent drug goes on as before. Our druggist friends tell us that even though they warn the purchasers of the danger of dinitrophenol, and advise its use only under the direction of a physician, the demand for it is unabated.

Some time ago there were several deaths reported from the injudicious use of this drug, and now come reports of serious involvements of the eyes, especially changes in the lens substance, which are believed to be wholly due to the use of dinitrophenol.

In the *Journal of the American Medical Association* for July thirteenth, several such cases are reported. In the September seventh issue of the same publication, four separate reports of similar complications are noted: one by Lazar of Chicago, two by the Doctors Cogan of Boston, one by Kniskern of Grand Rapids, and one by Allen and Benson of Chicago. The latter case developed in a woman of twenty-five about a year after the use of the drug. Incidentally, she was a student in Rush Medical College, and was able to give a very definite history of her experiences with the drug, having taken an average daily dose of 0.4 grams from December 30, 1934, to June, 1935—a total of 73 grams!

Only recently the lay press carried a news story to the effect that a remedy had been found that would clear up the lens substance, once it had been damaged by the use of dinitrophenol, but the story did not point out the obvious moral that had the drug not been used there would have been no occasion for a remedy.

With the mass of medical news now being printed in the lay press, and with what now amounts to a host of "health column" writers, too many of whom give rather specific advice as to treatment, it is small wonder that the lay public is taking generously to self drugging. Another evil responsible for much of this may be laid directly at the door of the physician. Not uncommonly does he suggest that the patient purchase a ten per cent solution of this or a bottle of that. And, too, there is extreme carelessness in prescription writing. We are taught that a prescription is a definite, direct order to the pharmacist, and that it should be written in pharmacological language. It is not necessary and often it is very inadvisable to write a prescription so that the patient can understand it. A local druggist tells us that it is not an uncommon occurrence for a customer to approach the prescription counter, extract from a purse or pocket a prescription, and proceed to order some drug or other. Not long ago such a customer, reading from his little piece of paper, ordered four ounces of lysol, and asked the druggist the number of drops usually taken as a dose. It developed that the customer had a prescription for Lugol's solution! Countless other such instances might be cited.

We must agree that self drugging is a growing practice, and that steps must be taken to curtail it. The remedy, as we see it, lies in two directions: (1) more discretion and common sense in advising and prescribing for our patients; and (2) drastic federal and state laws prohibiting the promiscuous sale of harmful drugs and compounds.

TO THE HIGHEST BIDDER

It is reputed that the famous French surgeon, Pean, conceived the idea of what has become the modern system of fee-splitting. He probably was honest in his belief that he was instituting a means of equalizing the surgical fee to benefit the

general practitioner, but he could not foresee its evils.

The evils have been recounted so many times that it is not necessary to dwell long upon them. There can be little doubt that few fee-splitting surgeons refuse many cases that do not require operation when the referring physician already has collected, in his mind's eye, his forty to sixty per cent. It does not seem possible that the best surgeon for the job always will be chosen by that referring physician who has his percentage of the fee foremost in mind. Also, the patient probably suffers, inasmuch as the surgeon must give so much of the fee away that he will try to charge and collect as much as he can get.

A comparatively new competitive system has now come into practice, apparently started by private hospitals. The bill is a single inclusive fee to cover the hospital bill and the services of the physicians. A surgeon on the staff of an open hospital, to compete with this, agrees to take a single fee and pay all hospital and other expenses, and for himself take what is left. On such a competitive price-cutting basis, the surgeon, after a case that does well, may have forty or fifty dollars left for such an operation as a hysterectomy, and if the patient does not do well and stays in the hospital longer than is expected, the surgeon actually may help to pay for the operative care. The patient is going to be given the cheapest service possible, which surely will not include a private nurse, x-ray and laboratory work, or unusual but often valuable therapeutic medicines and methods.

This is a terribly foolish and dangerous proposition, and certainly does not add to the dignity of the profession. It cannot make it easier for the young surgeon to earn enough to get on his feet. Dr. Robert T. Morris, in his esteemed book, values the training of a surgeon at $15,000 to $25,000. What has the young surgeon to look forward to when the older practicing surgeons are indulging in such petty and asinine competitive methods? The young surgeon, fresh from a hospital apprenticeship, knows little of these conditions. What must be his disillusionment when he settles in a town where every surgeon speaks of his surgeon-competitors as so many different kinds of so-and-sos!

If the lay person finds that he can get work done for nothing, he will take a chance on it. When hospitals find that they can get surgeons to work for nothing, more of them will try to enter the private practice of medicine and surgery with full time salaried physicians on the staff. Ultimately it will be the patient who will suffer because of a poor quality of work.

The difficult thing about these present tendencies is that while they are carried on extensively, yet they are spoken about with the same freedom as one talks of sexual indiscretions and privy necessities. Some hospital staffs might better be called Amalgamated Fee-splitter's Associations. Inasmuch as a large part of the medical profession are general practitioners, and apparently more and more of them in these troubled times seem keenly interested in this peddling of patients, why shouldn't the subject be discussed in hospital staff and county and state society meetings? Even as Pean believed, there may be some truth in the contention that the practitioner who cares for a patient for a large part of his patient's life should have some compensation. Why cannot the relation of the attending physician to the surgeon be more outspokenly defined, and a common procedure be recommended which is dignified and fair to all concerned, including the patient who is trying to get the best service and who pays the bill?

If fee-splitting and competitive bargaining for cases among physicians is bad and detrimental to the future welfare of medicine, let these practices be bared and discussed among ourselves in regular meetings rather than in whispering groups. If there is anything good or fair, let it be found out and accepted on an honest and standardized basis.

THE COUNTY FAIR

We journeyed down to our county seat the other day to make our annual visit to the county fair, a custom we have followed for some half century. Frankly, we were disappointed; there was something missing. The feeling that first arose within us a few years ago—that the county fair was becoming a decadent thing—was just about confirmed. The usual crowd was lacking, the midway had lost its former color and charm; the stock pens and the floral hall were more than half empty, while the half-mile track offered little of its former glory and splendor. The high-stepping trotters, the side-wheeling pacers, all with their elderly and masterful drivers, who in former days commanded our intense interest, seem to have disappeared from the tracks of the county fairs.

The county fair of 1935 in no wise compared with the Carroll County fair of the 80's, the little Poplar Grove Fair, in western Howard County, nor with the Clinton County fair of our later years. We have had a considerable experience with county fairs, and it is with a deep, almost poignant regret that we view the present situation. Back in the glamorous days when a county fair was something well worthwhile, one's pulse quickened as he neared the fair grounds and the hog pens, the cattle barns and the sheep pens—the whole vista opened before us! A half day was all too short to see the things that we wanted to see and that were worth seeing; why, we have often spent an hour or more in gazing at a quilt exhibit, and wended our homeward way resolving to spend an entire day the next year. Another thing that bothers us about this fair business is what are

we going to do with our 4-H boys and girls, if they have no home fairs at which to exhibit their prowess? The outstanding feature of our recent fair visit was the exhibit of a yearling steer, hand-raised by a little friend of ours down in the south end of the county. Jimmie was in to see us a week or two before the county fair and in his youthful exuberance told us about his proposed exhibit. He was not cocksure that his animal would take first prize, although he did admit that he had spent no little time and care in its rearing. So, when we walked into the exhibit barn and saw there Jimmie's name printed on the exhibit tag, when we looked the steer over and decided that he was a prize animal, when Jimmie Hunt came up to greet us and to tell us gleefully that the blue ribbon was his very own, that it would henceforth hang in his room, down Lowell-way, well, we felt that, after all, the county fair is a thing worth preserving, a necessary thing. We should very much dislike to forego the pleasures that have been accorded us by the county fairs we have intimately known and trust than once this old world gets back on its former axis, each county will have its annual fair, with all the appurtenances pertaining thereto.

EDITORIAL NOTES

The Time: Tuesday, Wednesday, and Thursday, October 8, 9, and 10, 1935.
The Place: Gary, Indiana.
The Event: The Annual Session of the Indiana State Medical Association.

DO YOU think you are having troubles in your local county medical society? Turn to Dr. Zerfas' historical article in this issue of THE JOURNAL and read the Dunlap-Mitchell-Coe controversy. In comparison to the troubles that were encountered then, yours will dwindle to little or nothing.

RECENTLY in the *Journal of the A. M. A.* was noted an inquiry regarding infections of the skin resulting from the handling of mica. The answer implied that some doubt existed as to the responsibility of the mica slivers, and that the condition might be due to one of the fungi that seem to thrive in that state (California). However, we recall that back in our hardware days, during the fall season when we were busy "setting up" stoves and handling considerable mica, it was not an uncommon experience to have these skin infections.

CARPENTER, in the *Journal of the Medical Society of New Jersey* for September, states that he picked up in Honolulu a formula for treating ringworm of the feet, and that it is invariably curative. It is as follows:

Iodine crystals	1.0
Acid salicyl	3.0
Ol. Ricini	10.0
Alcohol q. s.	30.0

IN THE annual report of the treasurer of the Kentucky State Medical Association, the following item is noted: "To Dr. ————: expense attending meeting of the American Medical Association as delegate, $....." We wonder when the Indiana State Medical Association will take a similar stand? There is not the slightest reason, so far as we know, why at least the traveling expenses of our delegates should not be borne by the Association. Again we express the hope that some official delegate will have the temerity to introduce the proper resolution at the first meeting of the House of Delegates in Gary.

PHYSICIANS who are given to the prescribing of drugs and diets for reducing purposes could profit by reading the current comment article on this subject in the September seventh issue of the *Journal of the A. M. A.* Editor Fishbein well states that many dangers are to be encountered in this field of therapy, and his warnings are well timed. We have strongly intimated in this magazine that, in our opinion, too many of our brethren "fall" for the pleas of their patients and more or less blindly enter upon a reducing program without regard to possible consequences. Some years ago we knew a physician who established a fair clientele among the fair sex by making a flat fee of one dollar for each pound reduced! In order to make this program successful he had to study the individual case and proceed with caution. That was before the day of the "high-powered" drugs now so commonly and carelessly used. We presume that some of our folks will continue reducing programs despite the fact that they carry dynamite with them. If you feel compelled to continue this phase of practice, beware of dinitrophenol.

"Withdrawal of Federal Indigent Sick Funds" is the title of an editorial on page 541 in this issue of THE JOURNAL. It is of great importance to every physician in Indiana; read it carefully.

REGULATIONS REGARDING NARCOTIC PRESCRIBING

Within the last few months, several Indiana physicians have been investigated by the grand jury. Some of these physicians have knowingly violated the law, but some have been victims of their own carelessness in prescribing narcotics unlawfully. When a patient is getting a goodly amount of morphine, or when a patient requests a narcotic for relief of acute pain, it would be well to check with other physicians to see that the patient is not getting any narcotic from another source. In the hope that it may clarify the regulations, we quote, on page 559, from the Treasury Department's Narcotic Pamphlet N-No. 56, "outlining procedure to be followed in prescribing and dispensing narcotic drugs."

E. S. Connell, *Journal Missouri State Medical Association* for September, comments on his experience in the use of ovarian substance in nose and throat surgery. He reviews the work done by others in the use of this substance in the management of hemophilia, which observations led him to try this treatment for controlling post-operative hemorrhage following tonsillectomy. In a cited case, one in which recurrent hemorrhage persisted over a considerable period of time, his results were so remarkable as to cause him to use ovarian substance before and after nose and throat surgery of major importance. He injects 1 cc. 15 minutes before operation and a like amount one hour later. In children he uses half this dosage. In persons over 200 pounds weight he customarily uses 2 cc. of the substance. In a total of 201 cases his results are such as to command more than ordinary interest in what is to us a new procedure.

The Journal for September carried a full page advertisement from the American Can Company, on "Food in the Open Can." There was a lot of worthwhile information in this little story, much of it that is new to many of us. It seems that the commonly held notion that the contents of a can should be removed as soon as the container is opened is erroneous. The ad goes on to state that "the belief that food must be emptied immediately from the can has been as thoroughly discredited as the 'ptomaine' theory of food poisoning." And those pronouncements have the official endorsement of the Council on Foods of the A. M. A. which makes it more conclusive. However that may be, some of the grannies, both in and out of the profession, will go about proclaiming the dangers of permitting food to stand in open can containers. This same American Can Company, by the way, seems to have developed other modern conceptions, among them being the now widely advertised "keg-lined" tin beer can, which they have recently introduced. This, so our friends tell us, is going over in a big way, much to the consternation, we opine, of the bottle manufacturers.

As the wife of the nouveau-riche gentleman is reported to have said to the queen, so we say of the president of the Texas State Medical Society, that "he said a mouthful" when he gave utterance to the following:[1]

"The average doctor apparently knows little about our parent organization (referring to the American Medical Association), and probably cares less.

"It is the largest and most influential medical organization known to man.

"It is the most democratic organization in existence.

"My attendance at a regular and special meeting of the House of Delegates of the American Medical Association has convinced me that the states wielding the most influence are those which year after year select and return as delegates their most active and influential members. For this reason, I suggest you select your delegates, keeping before you the idea of influence and efficient service; and that a majority of your delegates so selected be returned year after year."

We long have preached the same sort of doctrine. Indiana is represented in the A. M. A. House of Delegates by a thoroughly competent group, and by all means they should be continued in that capacity.

The prophylactic and therapeutic value of convalescent scarlet fever serum is discussed in a very well prepared article from the Samuel Deutsch Serum Center of Michael Reese Hospital, Chicago. Hoyne, Levinson and Thalheimer collaborate in the preparation of the report, and they comment on the fact that this serum has for quite some time been successfully used in the protection of individuals exposed to scarlet fever. The report analyzes a series of 862 cases in which the serum has been used with 97.2 per cent good results. In a series of Dick-positive cases in a hospital, all exposed to scarlet fever, the serum was successful in preventing a "take" in 95 per cent. Concerning complications, such as lymphadenitis, otitis media, and glomerulonephritis, the report states that these were prevented in about 50 per cent of the cases in which the serum was used. A marked decrease in temperatures was noted, which the authors attribute to the serum. Numerous comprehensive tables are supplied in the article, and it is highly informative and worthy of close study.

[1] *Texas Journal*, June, 1935, p. 80.

In this issue of THE JOURNAL are two articles that every physician in Indiana should read carefully: the editorial, "Withdrawal of Federal Indigent Sick Funds" on page 541, and "Regulations Concerning Prescribing of Narcotics" on page 559.

THYROID TESTS AT THE 1935 STATE FAIR EXHIBIT

GEORGE S. BOND, M.D.
HARRY BAUM
ROBERT ROYSTER

The Indiana State Medical Association this year sponsored a test for hyper- and hypo-thyroidism at the State Fair. From an attendance of 64,193 persons who visited the health exhibits, approximately 800 took advantage of the thyroid tests.

PRESENT METHODS OF DIAGNOSIS

The diagnosis of hyper- and hypo-thyroidism is not simple in many cases showing very suggestive symptoms. As a rule the clinician has to turn to some laboratory procedure for confirmation. At the present time these methods are still uncertain. The basal metabolic rate is not a definite indication of hyperthyroidism, but is a secondary phenomena. Therefore, it is influenced by many other factors than the thyroid (temperature, mental states, exercise, etc.). Also it requires considerable preparation of the patients and necessitates their full cooperation in the test if any degree of accuracy is obtained. Many physicians mistakenly accept basal metabolic readings as too definite an indication of thyroidism, because there is little else to turn to in corroborating the diagnosis. Blood cholesterol and other tests have been of some aid but as yet are not universally used. Therefore, any additional data that can be obtained in this class of patients will be of value.

NEW TEST

A new test has been suggested in the past two years which is now under examination to prove its value. For many years it has been known that the electrolytic reactions of the body fluids and tissues, to an alternating current of high frequency, were fairly constant in the individual. However, they were influenced distinctly by the change in the amount of thyroid secretion in the subject being tested. This experimental work received little attention until about two years ago when Dr. Brazier of London developed a technique whereby it could be applied to human beings, and he suggested its use as a test for thyroid disease.

METHOD OF TESTING

The patient immerses his arms in two tanks of 1% salt solution in which are placed two lead electrodes, and wires connect these to the instrument. Through this circuit is passed an alternating current of small amount and frequency ranging between five and fifty thousand cycles. It can be determined then, by the instrument, what resistance and condensor effect the patient's body offers to this current.

The test requires only about thirty seconds to perform and the patient needs no previous preparation.

Dr. Brazier determined that normal males and females fell into constant groups and that the individuals would remain constant from day to day. The male and female groups differ somewhat in their position on the scale. These reactions were not modified by any influence (such as exercise, fever, adrenalin, etc.) which usually changes the basal metabolic readings. The only thing that seemed to influence it was a patient who was hyper- or hypo-thyroid, or who was fed thyroid extract or thyroxin. The test, therefore, seemed to be very specific for thyroid disease.

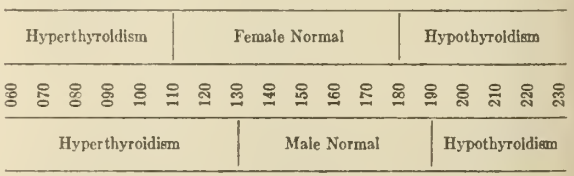
A similar instrument has been perfected in the Cardiac Department of the Indiana University, and more than one thousand readings have already been made, which seem to confirm very closely the work that has been done.

TESTS AT STATE FAIR

It was suggested that the people attending the State Fair would provide a good cross-section of the Indiana public, and that it would be interesting to get as many examinations as possible.[1] This was done, and approximately eight hundred readings were made during State Fair week with the following results:

Males		*Females*	
Number	157	Number	553
Enlarged gland	13	Enlarged gland	148
Had thyroidectomy.	2	Had thyroidectomy	22
Personal history of thyroid trouble	17	Personal history of thyroid trouble	156
Taken treatment for	4	Taken treatment for	76

The results are shown in the following chart in which the middle line represents the figures taken from the instrument and above and below are placed, in their relative positions, the female and male results.



[1] The report of the State Fair Committee is published under Committee Reports in this issue of THE JOURNAL.

(Continued on page xix)

THE PRESIDENT'S PAGE

STATUS OF STATE MEDICINE

As this year, 1935, is drawing to a close, both the medical profession and the general public have come to a more definite idea regarding proposed state medicine.

The medical profession is in more determined opposition against it, while the general public is more definitely aligning itself into two factions, one for and one against regimentation of the profession. Meanwhile, mischievous propaganda is stealthily being promulgated by socialists who are distinctly opposed to our profession.

Each physician is being continually bombarded with questions from certain members of his patronage who wish to be intelligent on the subject and we should equip ourselves with intelligent and convincing answers which will perfectly align them upon the right side of the controversy. Why? Because the public will finally decide the issue. Now, while we have a breathing spell, let us not waste our vantage points.

MALCONTENTS

One strange phenomenon exists, namely, that there are a few doctors scattered across the country who proclaim undivided devotion to and great interest in the medical profession, and yet they openly assert that even the A. M. A. is double-crossing the profession and encouraging socialized medicine; they carry their wailings to the *public press* for rapid and ruthless dissemination, thereby creating the greatest misunderstanding and fictitious view in the minds of the general public and greatly crippling the best efforts of organized medicine to enlighten and set right the public mind regarding state medicine.

If the malcontents within the nominal medical profession wish to impress us with their sincerity, they will confine their grievances to medical literature and their wailings to medical men.

These critics who profess so much devotion to their profession very well know that the A. M. A. is the embodiment of organized medicine in the U. S. A., and they simply accuse it of double-crossing itself which is absurd. It is just as absurd to use the public press instead of the medical press for a vehicle of intelligence by which to correct the evils of socialized medicine, and the procedure can well be compared to a stab in the back, which is a cowardly act.

THE GARY SESSION

The Gary Session has a brilliant outlook. The Program Committee has outdone itself in securing some excellent talent from without the state as well as within.

Dr. Shanklin's Committee on Arrangements has a reputation for hospitality and entertainment; the Hotel Gary is commodious and its management quite courteous. Do not fail to write for reservations. Take your wives, daughters, and sweethearts, and meet your classmates, overseas buddies, and fraternity pals.

And, by the way, we have seventy-two new members over last year—quite a healthy growth. More proof that economic burdens should and do increase the number of burden bearers, all looking toward better organized defenses and greater mutual interests.

Every member of the House of Delegates should be present at both meetings and return to the county societies with a full report of the proceedings of both sessions.

IMPORTANCE OF THE WOMAN'S AUXILIARY

The Woman's Auxiliary is indeed a very important factor of our organization and with proper encouragement may some day surprise us by the influence which its members exert in organized medicine. All they need is correct and intelligent impulses, prompted by trained and ethical ideals founded upon policies which are in sympathy with ethical organized medicine. They have many friends and associates of the highest order who are easily available for leadership. And it is with hopeful anticipation that we visualize a concrete influence born of a stubborn conviction in the minds of our women and their women friends and associates regarding questions of medical policies, ethics, and sociology, which must finally determine the question of our professional independence.

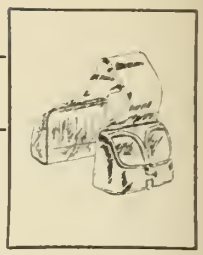
Our women, just as medical men, must be taught to speak and act in the most discriminative and technical fashion, in order to avoid erroneous and compromising results. Confusion of tongues and indeterminate controversy which comes from confusion in leadership and misunderstanding, inevitably results in wreckage and hopeless failure.

With proper leadership women will manifest great intelligence and even more enthusiasm and determination than will men on social questions, and from the standpoint of parenthood they occupy a more potential position for the early training of oncoming generations regarding social questions. Broadly speaking, the results of any great controversy will always depend upon unity of thought and action in its leadership.





INDIANA MEDICINE IN RETROSPECT



L. G. ZERFAS, M. D.
Historian, Indiana State Medical Association

THE MITCHELL-DUNLAP-COE CONTROVERSY

INTRODUCTION

In the September issue of THE JOURNAL[1] the biography of Dr. Samuel Grant Mitchell, the first physician to settle in Indianapolis, was given. Reference was made to a controversy which occurred between Dr. Mitchell and Dr. Livingston Dunlap on the one side and Dr. Isaac Coe on the other. The controversy, fortunately from a historical point of view, was published in the form of letters in the public press, more than a century ago. The controversy is being here republished precisely as it appeared because of the pertinent information which it contains relative to the formation of the Indiana Central Medical Society, the State Medical Association, and the activities and characteristics of the first three physicians who settled in Indianapolis in the year 1821. Subsequently, biographical data relative to Dr. Isaac Coe and Dr. Livingston Dunlap will be given. Suffice it to say that all three of these early pioneer physicians exerted great influence in the new settlement—medically, politically, and socially.



Isaac Coe, M. D.



Livingston Dunlap, M. D.

"Communicated:[2] At a meeting of the Indiana Central Medical Society, held at Indianapolis, May 3, 1830, agreeably to 'an act regulating medical societies, approved January 30, 1830,' the following members were present: Drs. Samuel G. Mitchell, Sylvan Morris,[3] Hiram Smith,[4] and Livingston Dunlap. The president being absent, the vice-president took the chair and proceeded to business. Whereupon satisfactory testimonials were produced by the following gentlemen to entitle them to membership, viz.: Drs. Edwin J. Beall,[5] Shelbyville, Shelby County, C. M'Dougal[6] and William Tichenor,[7] Indianapolis, Marion County, John Wiley,[8] Edinburgh, Johnson County, and Pearson Murphy,[9] Franklin, Johnson County.

"Dr. Morris moved that the society proceed to the election of officers for the ensuing year: Whereupon the following officers were elected:

Dr. Samuel G. Mitchell, President
Dr. L. Dunlap, Secretary
Dr. C. M'Dougal, Treasurer
Drs. Smith, Tichenor and Morris, Censors
Drs. Wiley, Beall, and Dunlap, Delegates.

"Resolved, That the proceedings of this society be published in both the papers in this place.

"Resolved, That the society adjourn till the first Tuesday after the meeting of the legislature.

S. G. MITCHELL, President.
L. DUNLAP, Secretary."

"Messrs. Douglass and Maguire:[10]

"In your last I perceive a notice purporting to be the proceedings of the Indiana Central Medical Society, held agreeably to the act of January 1830.

[1] *The Journal of the Indiana State Medical Association*, Indianapolis, Ind., Vol. 28, No. 9, September 1, 1935.

[2] *Indiana Journal*, Indianapolis, Ind., May 5, 1830, Vol. 8, No. 367.

References 3, 4, 5, 6, 7, 8, and 9 appear at end of article.

[10] *Indiana Journal*, Indianapolis, Indiana, edited by Douglass and Maguire, May 12, 1830, Vol. 8, No. 368, p. 3, c. 2.

"And since none of the proceedings mentioned were had according to law and no members were legally admitted, and no licenses which may be granted on the examination or under the signature of the officers said to be appointed can be valid, I feel it a duty to give public notice of the fact, as well that other physicians coming into the district may not be led to pay for a license of no value, as that the public may be aware that other physicians declined connecting themselves with a society which made no examination, but indiscriminately undertook to admit to membership all who applied; of whom I believe a majority if not all who were published as admitted had not the qualifications required by law, not having been either medical graduates, two years in practice in this state, or licensed to practice by authority of its laws. And however convenient it may be to admit to membership unlicensed practitioners, without examination, for myself I protest against any proceedings calculated to forfeit the confidence reposed by the legislature in the medical societies of our state, that they would take measures to ensure public confidence, by granting license to practice only on *examination* by a *qualified* board of censors.

Isaac Coe."

"Messrs. Douglass and Maguire:[11]

"I have seen, in your last paper, an article over the signature of Isaac Coe, in which he denounces the proceedings of the Central Medical Society as illegal; and states that, in consequence of that illegality, other physicians could not unite with the society.

"If persons at a distance were as well acquainted with this personage as the inhabitants of this place, it would be needless for me to notice his remarks; but as this is not the case I feel it an equal duty with that gentleman to lay before the public some facts relative to the proceedings.

"I believe all the members of the old society, with one solitary exception, met, took the subject under consideration, and were unanimous in the opinion of the course that was adopted.

"There was not an individual admitted to membership who did not come immediately under the letter of the law, that had not attended one full course of medical lectures, that had not practiced a number of years, or that did not give other satisfactory evidence of his capacity to practice. What further proof is necessary, after a conviction is produced in our minds, I am unable to discover. It is true that all who applied were admitted, yet it does not follow as a matter of course that *all who might apply* would be admitted. So the word "*indiscriminately*" may not be taken in so extended a sense.

"The generosity displayed by that gentleman in his timely warning to the public, with respect to physicians paying for license of no value, is without a parallel; but when he is made aware that there was no charge made, his designs will be not a little frustrated; and I shall take the liberty of informing him, that so long as the members dictate for themselves, our society will not be made an engine to filch cash from the pockets of our brethren. So in this, the Doctor, judging others by himself, has been led into an error. As to any confidence we have forfeited I protest against it, and am willing to leave it to a proper tribunal to decide; but I am unwilling to let it rest with a self-created judge. The plain fact is here: the gentleman was not so much disturbed at the manner members were received, as that he was not re-elected president (for life I suppose) as he held that office only ever since a society has been in operation here, which has been for the last six or seven years.

L. Dunlap."



Dr. Coe's home on the Governor's Circle (now Monument Circle). The house was built in the early thirties and stood on the site of the Columbia Club. (Photograph obtained through the courtesy of Miss Catherine A. Sickels.)

"To Dr. Isaac Coe:[12]

"Sir—In the *Indiana Journal* of the 12th inst., is a publication over your signature, in which you declare, that the "Central Medical Society" which lately convened in Indianapolis (the proceedings of which body have been published), acted in an illegal and unauthorized manner, calculated, in itself, to destroy public confidence in the society. You further charge that the members, at least a majority of them, were admitted to practice "without the qualifications required by law," that "none of their proceedings were according to law" and that "no members were legally admitted"—all of which assertions I believe to be without the slightest foundation in truth, and nothing more than the heated chimeras of your own distempered imagination.

[11] *Indiana Journal*, Indianapolis, Indiana, May 19, 1830, Vol. 8, No. 369, p. 3, c. 2.

[12] *Indiana Democrat, and State Gazette*, Indianapolis, Indiana, Thursday, May 20, 1830, No. 8, Vol. I. Whole No. 399, p. 3, c. 3.

"The act of the last legislature made it legal and indeed obligatory on "the District Societies to meet on the first Monday in May, in their respective districts" and says that after recording in the office of the clerk of the county, an attested copy of their proceedings, stating the name of the society and its officers, in such county as the last election was holden in, the society shall be duly constituted. Now all this was done, *propria forma*, and you, under your *sign manual* subscribed said proceedings, which were duly admitted to record; thus to all intents and purposes constituting the society according to law.

"You next deny the powers of the society to grant licenses, and the validity of any of their acts, on the assumption that they were illegally convened! And why illegally convened? Was it merely because *Dr. Isaac Coe* was not chosen president, ruler and dictator of the society under the new law? Most of the gentlemen resided at a distance from Indianapolis, and were anxious to discharge the business of the society and to return to their families and patients. After coming to order, the Vice President took the chair, and after the society was organized by the election of a president and secretary, it proceeded to business, and after considerable progress had been made, they were honored with the august presence of *Ex-president* Coe, who bustled into the French school room, and after making some promenading turns, through the room, which might have been mistaken for a cut of the *pigeon wing*, inasmuch as it was accompanied by the rattling of pill-boxes, gingling of vials, and a harmonious tingling of cupping glasses, he then demanded the chair (probably as an heritage,) and it must always be remembered, that he made the demand *in a very modest and unassuming manner*. This was after he had repaired to the table of the secretary, and discovered that he had not been honored with the office of *president*.

"Upon making this unpleasant discovery, he declared the whole proceedings illegal, denounced the members and impugned their motives, threw out many ungentlemanly allusions, & precipitately retired. We had a hope that he had taken French leave. In this we were sadly disappointed, for in a short half hour his return was announced by a repetition of his musical entrance chyming like the bells on the phylactery of a Jewish high priest, or the tingling ornaments on the leggings or moccasins of a Potawatomie Chief. He soon re-enacted his testy force, much to the mortification of every medical gentleman present, and I think with no little shame to himself. Finding he could not dictate terms to the society, he again withdrew, threatening vengeance, and menacing us with an attack in the public paper. He has redeemed his pledge and has probably relieved his spleen. As to his denunciations, I entirely disregard them. and as to the attempt to injure the standing and reputation of the members, by questioning their qualifications, it is harmless, on the ground that every person in the community knows the utter malignity and destitution of truth of the assertion.

"With regard to the qualifications requisite for members of District Societies, the law is explicit, and says—"The District Society may be composed of persons of good moral character, residing in their respective districts, who have been regularly licensed to practice medicine in this state, for two years preceding the passage of this act." Three of the gentlemen admitted, have been respectable practitioners of medicine in this state and could have joined the society under that provision. But neither them, nor the balance of the members wished to screen themselves from an examination. They were all gentlemen licensed in other states, and produced testimonials of having attended a regular course of medical lectures, and are men of good moral character and respectable attainments. These are the men whom you denounce as "*unlicensed practitioners.*"

Respectfully,

SAMUEL G. MITCHELL."

"Messrs. Douglas and Maguire:[13]

"In notifying the public in your paper of the 12th that the proceedings published in the preceding paper as being those of the Central Medical Society, were illegal, I discharged only what I believed my duty to other physicians and the public required, and in so doing was careful neither to assail the characters or motives of the gentlemen concerned, some of whom, are respectable as men and a few have it is believed been regularly licensed to practice medicine, and even those circumstances which would go to shew corrupt motive were concealed.

"And if an imposition was attempted on the public, would not every one censure me as implicated if I did not expose it? And from the interest I had taken in procuring the passage of a medical law, would I not justly be held culpable, should I wink at its violation, when I only was in possession of facts fully to make it known? These observations I premise lest any should consider my previous publication as an attack on others, and when the facts which their denial of my statement, make it necessary to publish are read, I trust the public will be satisfied, that my former publication was not dictated by any personal feelings of resentment or ill will, else those facts would not then have been concealed.

"It was certainly unwise by violating its provisions to lose the benefit of a medical law with so much difficulty obtained, and equally foolish to attempt an imposition on the public after being

[13] *Indiana Journal*, Indianapolis, Indiana, May 26, 1830, Vol. 8, No. 370, p. 2, c. 5. *Indiana Democrat and State Gazette*, Indianapolis, Thursday, May 27, 1830, Vol. 1, No. 9, p. 2, c. 3. Addressed in *Democrat* to editors: Messrs. Morrison & Kinnard.

warned that it would be exposed, and not less so by a denial of the truth of the statement to call forth those circumstances in its support, which otherwise would have been withheld. But more especially the manner in which this has been done has been still more unwise; if satisfied they had acted correctly, the same reasons which satisfied themselves might, if fairly and candidly stated, have satisfied others; but when both Doct. Dunlap in your paper, and Doct. Mitchell in the Democrat are out, and endeavor by a personal attack on me to divert the public from examining the correctness of their proceedings, every man of sense will suspect there is something "rotten in Denmark." And when such excitement of feeling is manifested as regards neither decency, truth or public feeling it surely betrays a bad cause. False quotations of law for instance are so easily detected, that a decent respect for the understanding of readers ought to prevent it; and when Doct. Mitchell declares my statement to be false, can he believe that any one acquainted with us both would take his in preference; and when Doct. Dunlap insinuates that statements made by me would obtain no credit here, he shows himself to be so maddened by passion, as at once to disregard public opinion and the dictates of his own conscience; and indeed the excitement under which both these productions are written, their disagreement between themselves and substitution of abuse for argument, all shew they consider their cause desperate, and yet have neither the candor to acknowledge it or the wisdom or self command to remain silent.

"Another consideration ought to have had weight, physicians are often called in circumstances of difficulty and danger to consult for the welfare of their patients, and before using the harsh and unkind language in which they have indulged or taking the course which has led them to do it, would it not have been well to have reflected whether, it would not be likely to destroy that confidence and good feeling necessary to make such consultations beneficial, and the frequent calls they have both made on my skill and my medicines for the use of themselves and families, and of my counsel, books and instruments for the benefit of their patients, and which have all been gratuitously bestowed, might suggest that possibly they might again be in circumstances to desire, what after so public a manifestation of their ill will they might be unwilling to ask.

"And to Doct. Dunlap in particular whom I found here destitute of medicine, instruments, books, or experience in the practice of medicine, who owes his life under Providence to my medical skill, whose family have largely called on my medical care, whose inexperience I so freely counselled, and who has so freely used my instruments and books, I would recommend the perusal of the fable of the woodman and the viper.

"Doct. Mitchell seems to feel a very strong antipathy to my presence, especially if accompanied by "vials" or "pill boxes"; this probably arises from so many of his patients when dangerous, evincing so contrary a feeling. That his nervous system should betray such great sensibility to the sound of my cups, is by no means surprising from the disagreeable dilemma into which they once brought him and his sweet tempered secretary when rather than call for my aid in a case beyond their skill to relieve, they chose to borrow of me instruments they had never learned to use, and after torturing and burning their patient without being able to make a cup stick; were forced to come for me, to teach them how.

"I shall now proceed to relate the circumstances under which the meeting was held, and those facts which go to shew the illegality of the whole proceedings, and if anything material shall be denied it will be proved. Some of the material facts are admitted in Dr. Mitchell's communication, which although almost as inaccurate as the fictitious, and with themselves inconsistent, accounts he has published to puff himself of the sickness of this place in 1821, yet contains a very few distorted truths.

"The law of the state and the constitution of the Central Medical Society fixed the meeting of the society in Indianapolis, the first Monday in May; of which due notice had been given by the secretary,[14] but they did not fix the place in Indianapolis or the time of day, and until this was otherwise fixed, any member who was that day anywhere in Indianapolis, was as much at the place of meeting as any other, and no meeting could be legally held without giving him, if to be found, notice of it; for if one might be omitted, so might another, and all except a bare quorum of three who might have assembled in some secret place and have done all the business, and if one company of three might have done this, so might another and as many such companies as could have been formed.

"But whose duty is it to give notice to the members? The constitution of the society says, it shall be the duty of the secretary 'duly to notify the members of the time and place of all meetings of the society.'

"But who is to fix the time and place? Was there no other provision on the subject, it would doubtless be the duty of the secretary, but the day of meeting and time is fixed by the constitution for annual meetings, and the society may, by their own adjournments, fix the time and place for others.

"But it is made the duty of the president on application of any three members to call extra meet-

[14] Medical Society: The members of the Indiana Central Medical Society, included within the bounds of Marion, Hendricks, Hamilton, Johnson, and Shelby counties, are notified to meet at Indianapolis, on Monday the 3d day of May. L. Dunlap, Secy., *Indiana Journal*, March 31, 1830.

ings—now where the time and place of regular meetings is not otherwise fixed, the duty of fixing it would of course devolve on the president as well from the above provision as the nature of his office; and neither the vice president or anyone else could do it until after the president had been applied to by three members and neglected or refused to do it; and according to Dr. Morris, in the morning, applied to me to know when and where the society should meet, and I appointed the meeting at my house at 10 o'clock, and being at that time somewhat engaged desired him to inform the other members,—and between 9 and 10 I called at the secretary's shop to inform him, should Dr. Morris not have done it, and not finding him there went to his dwelling, where I for the first time learned, and with much surprize, that they had already assembled in a grocery loft, and after some inquiry found the way to their concealment through a back yard; and on inquiry, found they had already admitted five members without examination, and elected all the officers, except the delegates, for whom they were then in the act of balloting.

"I mention these circumstances at length that everyone may judge whether there was not a concerted plan to hold a meeting secretly to avoid my being present, for even if any other person than myself had a right to fix the hour and place of meeting, say the secretary, still it was his duty by the constitution to give me notice. I was at my house, which was as much in Indianapolis as the place in which they assembled. And can anyone believe if there was no corrupt motive that any society would assemble on such an occasion and receive such a number of new members, and elect officers without their presiding officer, when he was so near and so easily notified, even if they could legally have done their business without.

"But what was the motive? Dr. Dunlap seems to think the only difficulty with me was because I was not chosen president. Men often judge others by their own feelings, and there might have been an arrangement for mutual accommodation between him and Dr. Mitchell on the one part, and those unlicensed candidates who wished to be admitted to membership but had the same antipathy to my examinations that Dr. Mitchell evinces at the sound of my cupping apparatus. At any rate I soon found they all acted in concert on a plan well understood by themselves; and after remonstrating with them on the illegality of their course, not only from having assembled at a different time and place from the one appointed, but in having proceeded to business, without having taken those previous steps which the law required to make their proceedings legal, and finding them determined to go on in the course they had begun, I left them.

"The law under which they were professing to act, declares that none of the medical societies in the state owing to defects in the law have been legally organized, but provides that after a record shall have been made in the recorder's office of the county, of the name of the society and the officers last elected, under the hands of the president and secretary, that *thenceforth* they shall be considered as legally existing. This record I informed them not having been made, none of their proceedings could be legal.

"After returning home I reflected on the disgrace which would attach to our society and the medical profession from such an irregular course of proceedings, and concluded to return and make another effort to persuade them to take a legal and correct course. I did so, and found them in the act of adjourning until 1 o'clock to devise, as I understood, some way of legalizing their proceedings. Dr. Dunlap immediately observed to me, Dr. Coe we shall want your certificate as president, to put on record. This was at once giving up the point that the election in the morning was illegal, for had it been legal Dr. Mitchell was the president whose signature should be affixed to the certificate. Accordingly Dr. Dunlap and myself made out and signed a certificate, he as secretary and I as president, that the last election was held in 1826, and he got it put on record in the recorder's office. Now if the statement in this certificate that the last election was in 1826 was true; that published in the papers that it was the 3rd of May, 1830, and which was held before the other certificate was made out, was false, and yet both are under Dr. Dunlap's own signature.

"I attended at 1 o'clock and Dr. Mitchell took the chair, I then stated to the society that although I had no wish to preside over them, yet it was necessary to make their proceedings legal that I should do it until they should make a new election, which they might do immediately, and doubtless all would vote as they did before and elect the same officers. In answer to which I was much surprised to see Dr. Dunlap rise and contend that the election in the morning was a good and legal one, thereby falsifying his own certificate just given and put on record. I also stated to them that the members had been illegally received, not only because the society was illegally constituted, but because some at least did not possess qualifications required by law, and presumed that if admitted at all they would wish their admission to be a legal one. The constitution was also read which prescribes that the officers of the society shall hold their offices until the close of the meeting at which their successors are elected. Yet in the face of all this they decided that Dr. Mitchell should keep the chair—that they would not go into a new election, nor review their proceedings in admitting members. In consequence of which I still remain the only legal president of the society, and am obliged to continue so until the society is dissolved, or a new election legally made. And after warning them

that if their proceedings were published I should notify the public of their illegality, I left them.

"In all these fruitless attempts to induce the society to take a correct and honourable course, I acted under a wish to preserve the reputation of a society over which I had had the honour to preside (if honour it be) ever since its formation, with a wish to promote its usefulness, and the respectability and usefulness of the profession to which I belong. My manner was I believe mild and conciliatory, while on the other hand men, who had already pledged themselves to each other, to a course, which they found themselves unable to defend by law or reason, resorted as their only alternative to passion and abuse; and for the same lack of argument, Drs. Mitchell and Dunlap have given us a sample of the same course as the public papers.

"My own impression was that there would be no difficulty in their agreeing to go into a new election of officers, had it not also involved the necessity of considering illegal their admission of members, and submitting all who had not been in practice in this state for two years to the dreaded ordeal of examination."

(Dr. Coe's letter and more of the controversy to be continued in the November Journal.)

[3] Sylvan B. Morris, M. D., was born in Washington County, Pa., November 24, 1795. He came to Shelby County and opened an office in the house of Alexander Vanpelt, at the mouth of Conn's Creek, in 1821, or nearly two years before Shelbyville was laid out in July of 1822. He then immediately moved to the new town of Shelbyville, where he continued to make his home until the time of his death, September 6, 1843. During his twenty-two years' residence in Shelby County, Doctor Morris practiced medicine and was active in all of the affairs of the community. He was a real pioneer of the county and the one pioneer physician of Shelby County, of whom we have the earliest reliable record. He was a son of David and Sarah Morris, natives of Pennsylvania, of Welsh descent, who moved to Warren County, Ohio, when Sylvan B. was a small boy. Here he grew to maturity and received his education in the public schools and the Lebanon Academy. Immediately after graduating from Jefferson Medical College he opened an office at Lebanon, Ohio, where he continued in the practice of his profession until he came to Shelby County in 1821.

He was married to Catherine Knox in Lebanon, Ohio, May 25, 1825; she was born in Londonderry, Ireland, in 1801, and they were the parents of three children—Martha H., John K., and Sylvan B.

Doctor Morris was an assessor and land appraiser in Shelby County. In 1828 and 1831 he was elected to represent the county in the state legislature. In 1829 he was elected clerk of Shelby County, and continued to serve the county in that capacity until February, 1843, when he resigned only a few months before his death.

For that early day Dr. Morris' education, both in literature and medicine, was far in advance of the time, and he naturally took a prominent place among the citizens of the new county and town, and was a prominent figure in all of the affairs of the community until the time of his death. (From: Edward H. Chadwick, *History of Shelby County, Indiana*, B. F. Bowen & Co., Indianapolis, 1909, pp. 202, 333.)

[4] Dr. Hiram Smith was the first physician to settle in Columbus, Indiana. He came in April, 1821, from Mercer County, Kentucky. Nothing is known concerning his medical education, but he is said to have been well read in his profession. He was a firm believer in the lancet and heroic doses of calomel and peruvian bark. He was chosen the first worshipful master of St. John's Lodge, which charter was granted in October, 1822. He was married at Edinburgh on November 30, 1826, to Miss Sarah M. Hunt. He died October 1, 1869, in the seventy-ninth year of his age. (From: G. W. H. Kemper, *A Medical History of the State of Indiana*, American Medical Association Press, Chicago, 1911, 100-102. *Indiana Journal*, Indianapolis, Ind., December 5, 1826. Elba L. Branigin, *History of Johnson County, Indiana*, B. F. Bowen & Co., Indianapolis, 1913, 512. Brant & Fuller, *History of Johnson County, Indiana*, Chicago, 1888, 529.)

[5] Dr. Edwin J. Beall probably came to Shelbyville about 1827. Very little is known of him. An epitaph on an old tombstone in the oldest part of the cemetery reads as follows: "Sacred to the memory of Edmund J. Beall, who departed this life March 16, 1837. Age thirty-one years, nine months and five days." He was apparently twenty-one years of age when he came to Shelbyville. (From: Edward H. Chadwick, *History of Shelby County, Indiana*, B. F. Bowen & Co., Indianapolis, 1909, 203. Brant & Fuller, *History of Shelby County, Indiana*, Chicago, 1887, p. 294.)

[6] Dr. Charles McDougal came to Indianapolis in 1828 from Ohio for a stay of four years. He formed a partnership with his brother-in-law, Dr. Dunlap, and they made a strong firm. Dr. McDougal was appointed a surgeon in the United States Army in 1832. He served in the Blackhawk and Seminole wars; was made a major in 1838; and served at West Point in 1846-48. At the beginning of the Civil War he was made medical director of the Army of the Tennessee, and in September, 1862, was put in charge of the medical director's office at New York City. He was brevetted brigadier general for meritorious service in 1865, retired in 1869, and died July 25, 1885, in Virginia. (Jacob Piatt Dunn, Greater Indianapolis, Lewis Publishing Co., Chicago, 1910, 543. Kemper, Medical History of the State of Indiana, 32. Elizabeth Moreland Wishard, William Henry Wishard, Hollenbeck Press, Indianapolis, 1920, 219. Francis B. Heitman, Historical Register and Dictionary of the U. S. Army, 1789-1903, Government Printing Office, Washington, D. C., 1903, Vol. I, 663. *Indiana Journal*, Indianapolis, Ind., June 19, 1828. Wm. H. Wishard, Medical Men and Medical Practice in the Early Days of Indianapolis, Transactions of the Indiana State Medical Association, 1893, 22. *Indiana Journal*, February 26, 1829; September 3, 1831; October 15, 1831; February 11, 1832; May 25, 1833.)

[7] "Having permanently located himself, Dr. William Tichenor tenders his medical services to the citizens of Indianapolis and vicinity. His experience in diseases and female situations the most critical of their lives has been very considerable. His shop is two doors below Mr. Hawkins' tavern, where he generally will be found, except when attending to professional business." *Indiana Journal*, Indianapolis, Ind., May 8, 1828; February 15, 1834.

[8] No further record of Dr. John Wiley has been found.

[9] Dr. Pierson Murphy was born in Fairfield County, Ohio, in 1800. He graduated from the Ohio Medical College in 1827. He migrated to Franklin, Indiana, in the summer of 1827, with a horse, bridle, saddle, gun and fifty cents. Franklin then consisted of some half dozen families living in log houses. He was the only physician in the village. Dr. Murphy, assisted by Dr. Hiram Smith of Edinburgh, Indiana, performed abdominal paracentesis in 1828 by making an incision into the abdominal wall of a patient with a thumb lancet. A small elder limb from which the bark and pith had been removed was inserted into the abdominal incision through which the fluid was removed. Dr. Murphy died in 1864 in the sixty-fourth year of his age. (From: R. W. Terhune, Physicians and Medical Practice in Elba L. Branigin, History of Johnson County, Indiana, B. F. Bowen & Co., Indianapolis, 1913, 495, 500, 510-12. Kemper, 319.)

DIPHTHERIA DEATHS FOR AUGUST, 1935

There were three deaths from diphtheria during the month of August. Two of the persons were three years of age; one was thirty-three. It will again be noticed that there are no children of school age reported. Diphtheria as a school disease seems to be pretty well wiped out, and this is doubtless an expression of the campaign of immunization which was particularly successful in the school age group.

The three deaths reported during August bring the total for the year up to fifty-one deaths, which is one more than the total for last year at the corresponding period, and thirteen less than the lowest previous total omitting 1934. The counties involved were Elkhart, Jackson, and Blackford, the last named county entering the list for the first time this year. As this report goes to press, we enter the last quarter of the year, which usually has more deaths from diphtheria than all the rest of the year.

Now is the time for physicians to be on the alert to catch diphtheria. For several months it has been a small factor and as a result attention has been directed away from it. October, November, and December are, however, by far the worst months of the year. Last year during the last three months there were fifty-nine deaths reported.

A list showing distribution of the deaths for the year and for the month of August, 1935, is given below:

County	No. Deaths August, 1935	Total for 1935
Allen	0	7
Bartholomew	0	1
Blackford	1	1
Boone	0	2
Clinton	0	1
Crawford	0	1
Dearborn	0	1
Delaware	0	1
Elkhart	1	2
Grant	0	2
Fayette	0	1
Jackson	1	2
Lawrence	0	2
Lake	0	1
LaPorte	0	1
Madison	0	1
Marion	0	14
Saint Joseph	0	2
Spencer	0	1
Steuben	0	1
Tippecanoe	0	2
Vigo	0	1
Wayne	0	1
Knox	0	1
Warrick	0	1
Total	3	51

THURMAN B. RICE, M. D., Chairman,
Diphtheria Prevention Committee.

Under the Capitol Dome

LICENSES TO PRACTICE

The State Board of Medical Registration and Examination has issued a license to Dr. Robert Willis Hatch on basis of his certificate from the National Board of Medical Examiners. Dr. Hatch will practice in Indianapolis. He is a graduate of the medical school of the University of Minnesota, class of 1932.

A total of 115 licenses to practice medicine in Indiana will be issued by the State Board of Medical Registration and Examination as the result of the 1935 examination which was conducted by the board last June, according to announcement of Miss Ruth V. Kirk, secretary for the board. The examinations were graded by the board at a special meeting of the medical board.

In addition to the medical licenses, the board also authorized issuance of eight licenses for the practice of osteopathy. The examination in this field was conducted at the same time.

Those who will receive certificates are:

MEDICAL CERTIFICATES

INDIANA UNIVERSITY

Loren Francis Ake
Ralph K. Arisman
Neal E. Baxter
Samuel E. Bechtold
Lowell F. Beggs
James G. Bledsoe
Clarence C. Bosselman
Edward B. Boyer
James S. Browning
Robert H. W. Brosius
Stanton L. Bryan
Robert M. Butterfield
Samuel S. Caplin
Vance J. Chattin
Stuart R. Combs
Charles E. Cook
Kermit Wendell Covell
James Crawford
Robert W. Currie
Jack Edward Dittmer
Joseph E. Dudding
Edward L. Efroymson
Aubrey W. Elsten
Richard E. Estlick
Joseph T. Farrell
John E. Fisher
Elvin L. Fitzsimmons
William A. Gitlin
Adolph Goldstone
Paul M. Gray
Clarence A. Hartley, Jr.
Clarence J. Haslinger
Robert P. Hill
John Kenneth Jackson
Francis P. Jones
Thomas R. Jones
Leo Kammen
William H. Kammerer
Ford F. Keppen
Chang Soo Kim
Robert J. W. Kinzel
Philip L. Kurtz
Joseph E. Lang
Glen Ward Lee
James M. Leffel, II
John W. Little, Jr.
Paul L. Long
Edward G. McArdle
Joe Henry McCool
Robert S. McElroy
George W. Macy
Lee J. Maris
Albert L. Marshall, Jr.
Richard Milton May

Harold Edwin Miller
Mahlon F. Miller
Virgil C. Miller
Noel Dunbar Moran
William K. Newcomb
Melvin Roy Nicholson
Harold Nisenbaum
William Robert Orr
John M. Palm
Durward W. Paris
John P. Pennell
Thomas A. Pierson
Gretchen I. Polhemus
Douglas W. Price
Lewis C. Robbins
Arthur D. Rosenthal
Jacob Rosenwasser
Theodore V. Ross
Burton V. Schieb
Kenneth Lee Shaffer
Meyer P. Shipman
Wilbur H. Shortridge
Homer B. Shoup, Jr.
Wendell A. Shullenberger
Lorin Slegelmilch
Isabel M. Slegelmilch
Howard A. Stellner
Morris E. Stern
Albert Edwin Stouder
Richard F. Stover
Wendell Carter Stover
Howard E. Sweet
Dan Eugene Talbott
James H. Taylor
Ray Gene Tharpe
Margaret R. Thoroman
Edward Carl Voges
Joe G. S. Weber
Donald Eugene Wood
George W. Wagoner
Walfred A. Nelson
Warren V. Morris

OTHER MEDICAL SCHOOLS

Charles F. Abell
Ivan A. Clark
Edward R. Cotter
Marcus H. Flinter
Francis H. Fox, III
Gilbert E. Garvin
Joseph Warren Gibbs
W. Russell Greenwood
Nicholas W. Hatfield
James M. Hicks, Jr.
Joseph Wheeler King
Lall G. Montgomery
Ivan Arthur Munk
Arthur J. O'Connor, Jr.
Kermit F. Perrin
Adolph C. Przednowek
Ruth R. Campbell
Harvey W. Sigmond
John Stancioiu Stanley

OSTEOPATHIC CERTIFICATES

Those to whom licenses as osteopaths were granted were:

Robert Randall Bass
Morris P. Briley
James A. Dillon, Jr.
Frank F. Fanally
John I. Fudenski
Edward Addison Porter
Robert Still Turfler
John Robert Schneider

GO TO GARY
OCTOBER 8, 9, AND 10
YOUR FRIENDS WILL GREET YOU THERE

SECRETARIES' COLUMN

To Secretaries of All County Medical Societies in Indiana:

The managing or directing of a county medical society is a large task. It is hard to please all the members, but if you can please the majority, you have done well.

Do not fail to read the editorial "Withdrawal of Federal Indigent Sick Funds" in this issue. It vitally affects you and every member of your society. After you read it, act upon the suggestion contained in the editorial to contact township and county officials concerning the future status of payment for medical services rendered the indigent sick. Do it NOW.

Also read the article on page 559 concerning regulations for the prescribing of narcotics. It is important.

Your society can do a great deal of good in your own community by giving the people some health education. They want education that is safe, sane, and reliable. Today the citizens in your locality are thinking more about cardiovascular disease, cancer, tuberculosis, and maternal care than you probably realize. These subjects are good meat both for lay meetings and for county society meetings.

It is rumored that all national health organizations in the country have their heads set on making a survey in their field. If the program of the county medical society is correct, there is no need for these surveys.

The annual secretaries' conference will be February 2, 1936. Mark your calendar now.

Remember the dates of the Gary session—October 8, 9, and 10. And BE THERE.

Your chairman,



DEATH NOTICES

RUSSELL E. PHILLIPS, M. D., of Warsaw, died August thirtieth, aged twenty-nine years. Dr. Phillips had practiced in Warsaw only four years, and in that time had become prominent in civic and professional enterprises. He was vice-president of the Warsaw Kiwanis Club, president of the Kosciusko County Tuberculosis Association, and secretary of the Kosciusko County Medical Society. He was a member of the Indiana State Medical Association and the American Medical Association. He graduated from the Indiana University School of Medicine, Bloomington and Indianapolis, in 1929.

JOHN L. COX, M. D., of Lyons, died August twenty-ninth, aged sixty-three years. Dr. Cox was a former coroner of Greene County. He graduated from the Hospital College of Medicine, Louisville, in 1898.

CYRUS A. GARDNER, M. D., of Kendallville, died August twenty-sixth, aged sixty years. Dr. Gardner had practiced in Kendallville for thirty-two years, and had been secretary of the Kendallville board of health for twenty-one years. He was a member of the Noble County Medical Society, the Indiana State Medical Association, and the American Medical Association. Dr. Gardner graduated from Rush Medical College, Chicago, in 1902.

JOHN NIXON, M. D., of Farmland, died August twenty-fourth, age seventy-six years. Dr. Nixon died as the result of injuries received when he stumbled and fell in his home. A few hours earlier, his mother, Mrs. Margaret Sater, died as the result of injuries received in a fall. Dr. Nixon had practiced medicine in Farmland more than thirty years. He graduated from the Medical College of Ohio, Cincinnati, in 1882. He was a member of the Randolph County Medical Society, the Indiana State Medical Association, and the American Medical Association.

JOHN R. HARROLD, M. D., of Roll, died August twenty-fourth, aged eighty-seven years. Dr. Harrold served with the 138th company, 14th Indiana regiment in the Civil War. He had practiced in and near Roll since 1881 when he graduated from the Medical College of Fort Wayne.

OTTO F. ROGERS, M. D., of Bloomington, died August thirtieth, aged sixty-three years. Dr. Rogers was a member of the Monroe County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the University of Louisville School of Medicine in 1900.

THOMAS WILLIAM WILSON, M. D., of New Harmony, oldest practicing physician in that city, died September first, aged seventy-five years. Dr. Wilson had practiced in New Harmony since 1888. He graduated from the Miami Medical College, Cincinnati, in 1887. He was a member of the Posey County Medical Society, the Indiana State Medical Association, and the American Medical Association.

DANIEL W. WEAVER, M. D., of Greensburg, died suddenly while on a vacation in Madison, Wisconsin. He was sixty-two years of age. Dr. Weaver was mayor of Greensburg, had served as school board president, and for several years was president of the Decatur County Tuberculosis Society. He was a member of the Decatur County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association. Dr. Weaver graduated from the Hahnemann Medical College and Hospital, Philadelphia, in 1896.

WILLIAM J. CHILDRESS, of Greenwood, died September fifth, aged sixty-one years. Dr. Childress graduated from the Hospital College of Medicine, Louisville, in 1900.

GEORGE W. WALLAGE, M. D., of Middletown, died September fifth, aged sixty-eight years. Dr. Wallage was health officer for Middletown, and had practiced medicine for thirty-nine years. He was a graduate of the Medical College of Indiana, Indianapolis, in 1895.

GEORGE W. LUTZ, M. D., of Indianapolis, died August twenty-first, aged eighty-seven years. Dr. Lutz was a graduate of the Medical College of Ohio, Cincinnati, in 1870.

NORRIS F. CONNER, M. D., of Red Key, died August twentieth, aged seventy-seven years. Dr. Conner graduated from the Eclectic Medical College, Cincinnati, in 1879.

WALTER W. HARRIS, M. D., of Bloomington, died August twentieth, aged sixty-nine years. Dr. Harris graduated from the Louisville Medical College, Louisville, Kentucky, in 1889. He was a member of the Monroe County Medical Society, the Indiana State Medical Association, and the American Medical Association.

HOOSIER NOTES

Dr. E. Rogers Smith, of Indianapolis, caught a bass weighing five pounds and ten ounces at Independence Lake, Michigan. This was one of the largest on record from that lake.

Dr. Charles B. Emery of Bedford has been made secretary of the Bedford Rotary Club.

Dr. George Moore of Hartford City and Miss Mary Terhune of Richmond were married in Middletown, September fifth.

Dr. H. O. Mertz of Indianapolis addressed members of the LaPorte Physicians Club, September tenth, in LaPorte.

Dr. Arthur Roser of Arcola and Miss Lillian Kluger of Indianapolis were married September eighth, in Indianapolis.

Dr. Grace Caufman has returned to Evansville after taking six months of special training in anesthesia in the Billings Memorial Hospital, Chicago. She will limit her practice to anesthesia.

Dr. and Mrs. Charles R. Elfers have moved to Jolietville to live. After practicing in Rising Sun for almost a year, Dr. Elfers is retiring from active practice, temporarily, because of ill health.

Dr. Charles P. Bacon, retired physician of Evansville, observed his ninety-ninth birthday, September sixth. He was in active practice in Evansville from 1873 until 1916, when he retired.

Miss Barbara Douglas of Franklin and Dr. Ralph J. McQuiston of Indianapolis were married September seventh in Franklin.

Dr. A. F. Hall of Fort Wayne spoke on "Diseases of the Skin" at a meeting of the Fort Wayne Beauty Shop Owners' Association, August twenty-sixth.

A new twenty-five bed hospital will be built by Dr. J. R. Baum and associates in Warsaw.

Dr. W. D. Inlow of Shelbyville recently addressed the members of the Shelbyville Rotary Club on the subject, "Mexico, A Country You May Want to Visit."

Dr. Bo Martin, son of the late Dr. H. H. Martin of LaPorte, has opened offices in LaPorte for the practice of medicine and surgery. Dr. Martin is occupying the offices of his father.

Dr. A. G. Moore of Deer Creek has resumed his practice after being confined to his bed for several weeks as the result of an automobile accident in which he received severe injuries.

Dr. Herbert L. Sedam has announced the opening of offices at 1820 East Tenth Street, Indianapolis, where he will practice general medicine and surgery in affiliation with the Sterne Memorial Hospital.

Dr. S. D. Malouf has returned to Peru after taking postgraduate work in Boston at the Lahey Clinic.

Miss Louise Freeland, daughter of Dr. and Mrs. L. T. Freeland of Shelbyville, became the bride of Dr. Laurence L. Smith of Evanston, Illinois, September ninth.

Dr. Joseph Strayer, who has been resident physician at the Boehne Tuberculosis Hospital in Evansville for several years, has been appointed superintendent of the Memorial Tuberculosis hospital at Richmond.

Dr. Werner W. Duemling of Fort Wayne has been made chief physician of the public schools for the coming year. He succeeds Dr. Charles R. Dancer who terminates twenty-six years as head of school physicians in Fort Wayne.

DR. R. M. NIGH has moved from Economy to Shelbyville where he will practice general medicine.

DR. EDWIN N. KIME of Indianapolis spoke before the American Society for the Study of Neoplastic Diseases at the annual meeting of the society in Washington, D. C., September 5, 6, and 7. Dr. Kime's subject was "Prognosis in Cancer."

DR. and MRS. F. E. WIEDEMANN, of Terre Haute, have returned from Europe where they spent the summer. Dr. Wiedemann says that he believes Europe slowly is recovering from economic disturbances, as compared with his observations last year.

THE Samuel D. Gross prize of fifteen hundred dollars for the year 1935 was awarded to Dr. Owen H. Wagenstein, of the Department of Surgery, University of Minnesota, Minneapolis, for his essay entitled, "The Therapeutic Problem in Bowel Obstruction."

DR. RUSSELL LAVENGOOD and Dr. Ralph LeMasters have made an office and residence of one of the fine homes in Marion at Ninth and Washington Streets. Offices are on the first floor and residential quarters are on the second floor.

"INFORMATION Regarding the Prevention of Diseases" is the title of a brochure prepared by the Bureau of Publicity of the Indiana State Medical Association which was distributed at the Indiana State Fair health exhibit. The pamphlet included information about smallpox, diphtheria, whooping cough, typhoid fever, scarlet fever, and suggestions as to general care.

SEVENTH DISTRICT MEETING

The Seventh District Medical Society will meet in Indianapolis at 1 p. m., November 12, 1935, for a full afternoon, dinner and evening program. The Indianapolis Medical Society will be the host and a comprehensive program is being arranged. It is the wish of the officers of the society to present the clinical matter that is desired by the members and guests attending, and any suggestions or requests will receive consideration. A speaker from out of town will present a clinic and lecture as a feature of the program.

Complete program will appear in the November *Journal*.

ELEVENTH DISTRICT MEETING

The next meeting of the Eleventh Indiana Councilor District Medical Association will be held in Peru, Wednesday, October 30, 1935.

Dr. Sumner L. Koch of Chicago will present an illustrated address on the subject of "Diseases and Surgery of the Hand." A pediatrician will hold a clinic in the forenoon and give an address in the afternoon. Dr. Ralph LeMasters of Marion will be the local representative on the program.

In the evening a banquet will be held under the auspices of the Miami County Medical Society.

This is expected to be one of the best meetings ever held by the Eleventh District Society. A cordial invitation is extended to all members of the Indiana State Medical Association to attend.

BEGINNING October first, the American Medical Association will introduce a new radio program over the Blue network of the National Broadcasting Company. A new type of program, in vivid dramatic form, with incidental music, is being developed, showing medical emergencies and how they are met. The toast "ladies and gentlemen, your health . . ." will introduce the program which will be broadcast at 5:00 p. m. Eastern Standard Time, 4:00 p. m. Central Standard Time, and 3:00 p. m. Mountain Time.

AMERICAN COLLEGE OF SURGEONS FRACTURE COMMITTEE

Under the direction of the American College of Surgeons' Fracture Committee, Dr. D. R. Ulmer, of Terre Haute, is working to establish regional fracture committees in Indiana, and has adopted as a slogan: "Indiana, the best state in the union for good fracture results."

The need in Indiana is for better distribution of fracture equipment; better transportation facilities for fracture patients; better small hospital equipment; better understanding of fractures by our profession; better and more teaching and demonstrations of fractures by the universities; better and more postgraduate work; better equipment and understanding of the fracture situation by ambulance forces, state police, Red Cross, boy and girl scouts; more physicians and laymen interested in fractures; and a social service auxiliary committee to aid in caring for indigent unfortunates, in and out of hospitals.

District appointees have been asked to gather data from their own communities which is to be correlated and discussed at the time of the annual session of the Indiana State Medical Association in Gary. An outline of proposed activities has been supplied to district chairmen. Further announcements may be made following the meeting in Gary. Physicians interested in this work are invited to get in touch with Dr. D. R. Ulmer of Terre Haute who is in charge of the work in Indiana.

OUTLINE OF PROCEDURE TO BE FOLLOWED IN PRESCRIBING AND DISPENSING NARCOTIC DRUGS, ISSUED FOR THE GUIDANCE OF NARCOTIC AGENTS IN CHARGE, AND OTHERS CONCERNED.*

(This information is intended to be advisory only, and to anticipate and answer questions arising in the minds of practitioners in regard to the law and regulations governing the prescribing and dispensing of narcotic drugs.)

The regulations governing this subject are contained in article 85, Regulations 5, and read as follows:

Purpose of Issue. A prescription, in order to be effective in legalizing the possession of unstamped narcotic drugs and eliminating the necessity for use of order forms, must be issued for legitimate medical purposes. An order purporting to be a prescription issued to an addict or habitual user of narcotics, not in the course of professional treatment, but for the purpose of providing the user with narcotics sufficient to keep him comfortable by maintaining his customary use, is not a prescription within the meaning and intent of the act; and the persons filling and receiving drugs under such an order, as well as the person issuing it, may be regarded as guilty of violation of the law.

Exceptions.—Exceptions to this rule may be properly recognized (1) in the treatment of incurable diseases, such as cancer, advanced tuberculosis, and other diseases well recognized as coming within this class, where the physician directly in charge of a bona fide patient suffering from such disease prescribes for such patient, in the course of his professional practice and strictly for legitimate medical purposes, and in so prescribing, indorses upon the prescription that the drug is dispensed in the treatment of an incurable disease; or if he prefers he may indorse upon the prescription "Exception (1), article 85"; (2) a physician may prescribe for an aged and infirm addict whose collapse would result from the withdrawal of the drug, provided he indorses upon the prescription that the patient is aged and infirm, giving age; or if he prefers he may indorse upon the prescription "Exception (2), article 85."

General.—It is impossible to state an inflexible rule which will cover all cases, and this outline must, therefore, be general in nature and subject to modification through further interpretation of the law by the courts. The bureau is not charged with the duty of laying down any fixed rule as to the furnishing of drugs or the frequency of the prescriptions in any particular case. This responsibility rests upon the physician in charge of the case. While the primary responsibility rests upon the physician in charge, a corresponding liability also rests upon the druggist who knowingly fills an improper prescription or order whereby an addict is supplied with narcotics merely for the purpose of satisfying his addiction. Caution should be exercised to avoid being imposed upon by unscrupulous persons, and too much credence should not be given to the unsupported statements of the addict himself, because the confirmed addict will go far beyond the truth in an attempt to secure an ample supply of narcotic drugs with which to satisfy his cravings.

The good faith of the physician and the bona fides of his treatment in a given case will be established by the facts and circumstances of the case and the consensus of medical opinion with regard thereto, based on the experience of the medical profession in cases of similar nature. Physicians will be charged with violation of the law if, through carelessness or lack of sufficient personal attention, the patient secures more narcotic drugs than are necessary for medical treatment and devotes part of his supply to satisfy addiction.

Use of Narcotics in Treatment of Disease Without Reference to the Question of Addiction.—Without reference to the question of addiction, a physician acting in accordance with proper medical practice may prescribe or dispense narcotics for the relief of acute pain or for any acute condition, such as influenza, pneumonia, renal calculi, broken limbs, etc.

Use of Narcotics in the Treatment of Incurable Disease.—A reputable physician directly in charge of bona fide patients suffering from diseases known to be incurable, such as cancer, advanced tuberculosis, and other diseases well recognized as coming within this class, may in the course of his professional practice, and strictly for legitimate medical purposes, dispense or prescribe narcotic drugs for such diseases, provided the patients are personally attended by the physician who regulates the dosage, and prescribes no quantity greater than that ordinarily recognized by members of his profession to be sufficient for the proper treatment of the given case. The danger of supplying persons suffering from incurable diseases with a supply of narcotics must be borne in mind, because such persons may use the narcotics wrongfully, either by taking excessive quantities or by disposing of a portion of the drugs in their possession to other addicts or persons not lawfully entitled thereto. The physician should endorse upon the prescription that the drug is dispensed in the treatment of an incurable disease, or if he prefers he may endorse upon the prescription "Exception 1, article 85."

Use of Narcotics in the Treatment of Addiction Only.—Mere addiction alone is not recognized as an incurable disease. It seems necessary, however, to divide the addicts not suffering from an incurable disease into two classes: (a) Those suffering from senility or the infirmities attendant upon old age, who are confirmed addicts of years standing, and who, in the opinion of a reputable physician in charge, require a minimum amount of narcotics in order to sustain life; and (b) those whose addiction is not complicated by incurable disease or by the infirmities attendant upon old age.

(a) *Aged and Infirm Addict.*—Addicts suffering from senility or the infirmities attendant upon old age and who are confirmed addicts of years standing may be, for the purpose of enforcing the law, treated as addicts suffering from incurable diseases. In such cases, where narcotic drugs are necessary in order to sustain life, a reputable physician may prescribe or dispense the minimum amount necessary to meet the absolute needs of the patient. In this class of cases the physician issuing the prescription should make a statement on the prescription to the effect that the patient is aged and infirm, giving age, and certifying that the drug is necessary to sustain life, or, if he prefers, he may endorse upon the prescription "Exception 2, article 85."

(b) *The Ordinary Addict.*—It is well established that the ordinary case of addiction yields to proper treatment, and that addicts will remain permanently cured when drug taking is stopped and they are otherwise physically restored to health and strengthened in will power. A physician may, in the course of his professional practice only and in accordance with the consensus of medical opinion, afford temporary relief to an ordinary addict whose condition demands immediate attention by prescribing or dispensing the minimum quantity necessary to prevent his collapse and enable him to reach a hospital, institution, or place where treatment under proper restraint is to be undertaken. Such cases should be cautiously handled and the physician in charge should satisfy himself that the narcotics thus furnished are not to be diverted for an unlawful purpose, that steps looking toward such treatment actually have been or promptly will be taken, and that the conditions are such (usually indicated by the presence of a responsible accompanying nurse or attendant) that the addict cannot augment his supply of drug by securing additional amounts from another source. This bureau has never sanctioned or approved the so-called reductive ambulatory treatment of addiction for the reason that where the addict controls the dosage he will not be benefited or cured. Medical authorities agree that the treatment of addiction, with a view to effecting a cure, which makes no provision for confinement while the drug is being withdrawn, is a failure, except in a relatively small number of cases where the addict is possessed of a much greater degree of will power than that of the ordinary addict.

* From the Treasury Department, Narcotic Pamphlet N-No. 56.

SOCIETIES AND INSTITUTIONS

COUNTY SOCIETY REPORTS

CARROLL COUNTY MEDICAL SOCIETY held a dinner meeting at Bringhurst, September twelfth. Dr. F. C. Walker of Indianapolis presented a paper on "Gynecologic Aphorisms."

* * *

CASS COUNTY MEDICAL SOCIETY members held a dinner meeting at Royal Centre, September thirteenth. Dr. Louis H. Segar of Indianapolis was the speaker.

* * *

DAVIESS-MARTIN COUNTY MEDICAL SOCIETY members and guests enjoyed a fish fry at the Dr. Wadsworth cabin, near Washington, September tenth. Dr. John Cunningham of Indianapolis presented a paper on "Common Colds and Coughs." Thirteen members and ten guests attended.

* * *

ELKHART COUNTY MEDICAL SOCIETY held its first fall meeting at Elkhart, September fifth. Dr. Herman L. Kretschmer of Chicago was the principal speaker.

* * *

FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY held its first fall meeting at the Chamber of Commerce, Fort Wayne, September third. Dr. Don Cameron presented a report of the proceedings of the House of Delegates at the Atlantic City session of the American Medical Association. Dr. W. W. Duemling outlined the rules and regulations for the care of the indigent sick. Plans to include a board of trustees in the governing body of the Fort Wayne Medical Society were discussed at the meeting, and a committee was named to draw up an amendment to the society's constitution, enabling the move.

* * *

GIBSON COUNTY MEDICAL SOCIETY held a meeting at the Emerson Hotel, Princeton, September ninth. Dr. Max A. Bahr of Indianapolis presented a paper on "Mental Mechanisms of the Mind Diseased." Attendance numbered twenty-six.

* * *

HOWARD COUNTY MEDICAL SOCIETY held its first fall meeting at the Francis hotel in Kokomo, September sixth. Dr. C. B. Bohner of Indianapolis was the principal speaker. His subject was "Allergy."

* * *

HUNTINGTON COUNTY MEDICAL SOCIETY held a meeting at the Hotel LaFontaine, Huntington, September third. Dr. James F. Balch of Indianapolis talked on "Interesting Problems in Genitourinary Practice." Attendance numbered fourteen.

* * *

JAY COUNTY MEDICAL SOCIETY held a meeting September sixth at the Portland County Club. Drs. Hugh Berkey, Victor Hilgeman and L. A. Fonner, dentists of Fort Wayne, presented the topic, "The Inseparable Relation of Dentistry and General Medicine."

* * *

KOSCIUSKO COUNTY MEDICAL SOCIETY held its regular meeting at the Hotel Hays, Warsaw, September tenth. Dr. O. H. Richer was elected as secretary to succeed the late Dr. R. E. Phillips. Dr. C. E. Thomas of Leesburg presented a paper on "Eclampsia."

* * *

LAWRENCE COUNTY MEDICAL SOCIETY members held a dinner meeting September fourth at Bedford. Dr. C. H. Emery of Bedford read a paper on "Medical Economics."

RANDOLPH COUNTY MEDICAL SOCIETY members met September ninth at the Randolph County Hospital. Dr. Cassius Shepard of Columbus, Ohio, was the guest speaker, his subject being "The Recent Advances and Treatment of Fractures."

* * *

TIPPECANOE COUNTY MEDICAL SOCIETY members met at Lincoln Lodge, Lafayette, September tenth, to hear Dr. Carl D. Camp of Ann Arbor, Michigan, talk on "Hypersomnia and Insomnia." Attendance numbered seventy-five.

INDIANA DIVISION OF PUBLIC HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report, August, 1935

Diseases	Aug. 1935	July 1935	June 1935	Aug. 1934	Aug. 1933
Tuberculosis	250	177	193	120	93
Chickenpox	6	24	89	5	5
Measles	27	89	343	33	30
Scarlet fever	99	90	232	69	82
Smallpox	0	7	4	5	2
Typhoid fever	69	28	10	112	94
Whooping cough	139	146	110	130	102
Diphtheria	58	41	51	41	41
Influenza	124	48	27	51	108
Pneumonia	51	33	68	3	5
Mumps	10	33	80	3	3
Poliomyelitis	8	2	2	6	4
Meningitis	10	7	11	3	10
Malaria fever	12	8	0	4	8
Encephalitis	3	1	1	2	1

CARROLL COUNTY MEDICAL SOCIETY

RESOLUTIONS IN MEMORY OF DR. J. J. SHULTZ, READ AND ADOPTED AND MADE PART OF THE RECORDS AT THE MEETING AT BRINGHURST, SEPTEMBER 12, 1935

Since the last meeting of the Carroll County Medical Society we have lost one of our outstanding members, the dean of our organization and one of its first presidents, Dr. Judson J. Shultz. Dr. Shultz died May 21, 1935, in his eightieth year. He was born in Carroll County, came to Delphi at the age of eight, graduated from the local schools, attended DePauw University, graduated from the Eclectic Medical College, Cincinnati, and began practice here with his father, Dr. Francis Shultz, in 1880.

In 1881 he married Ella McClure, who died in 1929. To them three children were born, Jennie, Helen, and Ione. Dr. Ione later practiced medicine with her father, to his great satisfaction. Dr. Shultz was a member of the Indiana State Medical Association, the Eleventh Councilor District Society, and the Carroll County Medical Society. To our knowledge, he never missed a meeting and took the keenest interest in our proceedings. Dr. Shultz studied the new methods of his profession and only three weeks before his death diagnosed a rare disease which had baffled younger physicians. He was the first doctor in the county to diagnose tularemia when it became prevalent a few years ago. He was an authority on botanical subjects, and an entertaining talker.

In offering resolutions on the death of Dr. Shultz, we feel that no one could better express our thoughts than the editor of the *Delphi Citizen*, who, following the doctor's death, paid this tribute to the beloved physician:

"Delphi has lost an institution. The death of Dr. Shultz comes as a shock to the community. We had considered him as the world considers George Bernard Shaw to whom he bore a distinct resemblance—too young to die. His step remained brisk and his mind active. He could be found in a company of friends at Crosby's, hours after conventional oldsters were in bed.

"Dr. Shultz was unconventional in other things than hours. Basketball games lost some of their color on those rare occasions when he failed to show up. He kept up with the latest movies. School and community activities found him an enthusiastic patron.

"For fifty years Dr. Shultz was a practicing physician—a family doctor, as he would like best to be called. His personality embodied the oldest and best traditions of the family physician. During those fifty years he brought more than medicine to ill people. He brought sympathy and understanding to suffering friends. No one could estimate what a wealth of service he had rendered the community during those years himself.

"Dr. Shultz died in a manner in keeping with his character—he died with his boots on. He was in the very prime of life just as truly as in the days when his beard was several shades darker and he had just climbed into his buggy for a race with the stork or the grim reaper. And no will deny that until Tuesday morning, shortly after midnight he KEPT A BIG LEAD ON THE MAN WITH THE SCYTHE."

Here ends the quotation from the *Citizen*.

This week, after sixty-seven years, the small sign on the frame building in Delphi designating it as the office of a Dr. Shultz, was taken down. Dr. Francis Shultz, Dr. Judson Shultz have joined "the innumerable throng" that will not return. Dr. Ione Shultz Clayton is leaving October first, to practice medicine elsewhere. With her going, with the removal of the old sign, the medical profession loses from its roll the Shultz name, a fact deeply regretted by this society.

Though the name will be off the roll, the genial, loving character, the ability and rugged honesty, the ever beautiful comradeship of Dr. "Jud" Shultz will never be forgotten.

CHARLES C. CRAMPTON, M. D., *Chairman.*

KOSCIUSKO COUNTY MEDICAL SOCIETY

The Kosciusko County Medical Society feels that it has sustained a great loss in the death of its Secretary-Treasurer, Dr. Russell E. Phillips.

Although he had been a member of this society for the short period of about four years, he had endeared himself to all the members and had proved his efficiency not only as a member of the medical profession, but in his duties as an officer of the society.

He had not only established an honorable position within the profession, but was also held in high esteem by his many patients.

In addition to his medical activities he was a fine factor in civic affairs in this community, being a member of the Elks, Masonic Lodge, Vice-President of the Kiwanis Club and President of the Kosciusko County Tuberculosis Society.

Therefore, be it resolved that a copy of this memoriam be spread upon the minutes of our Medical Society, a copy be forwarded to his bereaved family, a copy sent to each of the Warsaw papers and the JOURNAL of the Indiana State Medical Association.

Respectfully submitted,
KOSCIUSKO COUNTY MEDICAL SOCIETY,
C. NORMAN HOWARD, *Chairman,*
W. BERT SIDERS,
E. W. THOMAS,
Committee.

Adopted by the Kosciusko County Medical Society under date of September 10, 1935, in regular session.

T. J. CLUTTER, *President.*
O. H. RICHER, *Vice-President and Secretary.*

INDIANA STATE MEDICAL ASSOCIATION

BUREAU OF PUBLICITY

August 8, 1935.

Present: William N. Wishard, M. D., Chairman; J. H. Stygall, M. D., and T. A. Hendricks, Executive Secretary.

Release, "Good Health Exhibit at Indiana State Fair," corrected and approved for publication in Monday papers, August 26, 1935.

The State Fair Committee made a request that the Bureau of Publicity prepare a pamphlet to be distributed at the state fair. Several years ago the Bureau of Publicity distributed a pamphlet entitled, "Information Regarding the Prevention of Contagious Diseases." This pamphlet was to be checked by one member of the Bureau and brought up to date in order that it may be made suitable for the state fair distribution.

A request was received from the director of publicity of Indiana University in regard to an exhibit at the state fair on the subject of deep burns. The Bureau delegated two of its members to view this exhibit in order to obtain an opinion as to its suitability for a general and not a professional display. The Bureau feels that great care must be taken that such exhibits do not contain anything which might have a revolting reaction on the part of the public.

THE EXECUTIVE COMMITTEE

September 8, 1935.

Meeting called to order at 11:00 a. m.

Roll call showed the following present: W. H. Kennedy, M. D.; H. H. Wheeler, M. D.; W. J. Leach, M. D.; O. O. Alexander, M. D.; R. L. Sensenich, M. D.; A. F. Weyerbacher, M. D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

Minutes of the meeting of June 2, 1935, approved.

The monthly statements of Receipts and Expenditures and reports of the Budget for June, July and August, for the Association committees and THE JOURNAL were made.

Report of Treasurer

(1) Report of Protective Committee for Holders of Beachton Court Apartment Bonds ($4,000.00) presented by the treasurer. As there has been some appreciation in the value of these bonds the Committee authorized the treasurer to continue to hold them.

(2) The Committee approved the surety bonds on the executive secretary and assistant from the W. E. Barton Agency.

Membership Report

Number of members on August 31, 1935	2,715
Number of members on August 31, 1934	2,643
Gain over last year	72
Number of members on Dec. 31, 1934	2,741

1935 Meeting at Gary

(1) The annual report of the Executive Committee was presented to the Committee for corrections and suggestions and approved by the Committee for publication.

(2) *Badges.* Badges were selected by the Committee and instructions were given that all names on the badges be typed in capital letters so that they can be distinguished plainly.

(3) *Annual Banquet.* Besides the speakers' table, special tables are to be reserved for ex-presidents and their wives and someone who knows all the ex-presidents is to be on hand to usher them into their places.

The following will be asked to sit at the speakers' table:

State Association Officers:

President
President-elect
Past president (to receive certificate of merit)
Treasurer
Chairman of Council
Editor of THE JOURNAL
Chairman of Executive Committee

Local:

General Chairman of Local Arrangements
President of local society
Secretary of local society
Councilor of the district

Outstate essayists and eminent guests:

Isaac A. Abt, M. D., Chicago
Ralph M. Waters, M. D., Madison, Wisc.
Norman F. Miller, M. D., Ann Arbor, Mich.

Louis J. Karnosh, M. D., Cleveland, Ohio
A. L. Schwartz, M. D., Cincinnati
M. L. Axelrod, D. D. S., Cleveland, Ohio
J. S. Lundy, M. D., Rochester, Minn.
J. Tate Mason, M. D., Seattle, Wash.
Virgil S. Counseller, M. D., Rochester, Minn.
Sanford R. Gifford, M. D., Chicago
Elexious T. Bell, M. D., Minneapolis, Minn.
William F. Braasch, M. D., Minneapolis, Minn.
Louis G. Herrmann, M. D., Cincinnati, Ohio.
Emmet F. Horine, M. D., Louisville, Ky.
Dean of medical school
Harold M. Camp, M. D., secretary, Illinois State Medical Society
E. L. Mitchell, D. D. S., president, Indiana State Dental Association

(4) *Chairman of Credentials Committee.* Dr. W. F. Carver of Albion was appointed by the president to take the place of Dr. George D. Miller as chairman of the Credentials Committee for the annual meeting at Gary. Other members of the committee are: J. W. Bowers, M. D., Ft. Wayne, and P. H. Schoen, M. D., New Albany.

(5) The Executive Committee is to meet Monday night, October 7, at eight o'clock.

(6) *Invitations to Secretaries and Presidents of County Medical Societies to Attend House of Delegates' Meeting.* Special invitation is to be sent to the president and secretary of each county medical society to attend the first meeting of the House of Delegates in order that they may listen in at first hand on the proceedings of the House and also hear the special report of the president-elect, Dr. R. L. Sensenich, in regard to a suggested program for 1935 and 1936.

Legislative and Legal Matters

(1) *Narcotic regulations.*

(a) Correspondence in regard to a case in Dearborn-Ohio County Medical Society, brought to the attention of the Committee. As the correspondence from the American Medical Association has been forwarded to the local county medical society, the Committee does not feel that there is any further action to be taken in this matter at this time.

(b) An article will appear in the October JOURNAL concerning the relation of the physician to the subject of narcotic regulations. This article was prepared after conversation with E. A. Crews, head of the United States Narcotic Inspection Division, Indianapolis. It is the feeling that physicians often through their own carelessness in failing to keep records get in a jam with the government. Mr. Crews said that physicians should be suspicious of patients coming to their offices, self-diagnosing their cases and stating that the only thing which will help them is morphine. The inspector says that when such men come to a physician's office they are calling upon several physicians and thereby are able to obtain a large quantity of morphine.

(2) *Social Security Bill.*

(a) Appointment of a liaison officer for the State Division of Public Health. At the request of Dr. Harvey the Indiana State Medical Association was asked to suggest the names of physicians who might act as a liaison man for the State Division of Public Health to carry out the provisions of the Social Security Act under the direction of Dr. Harvey. The Committee was unable to suggest anyone at this time.

(b) Appointment of liaison committee. At the suggestion of Dr. Harvey a committee was appointed of two men each from the Indiana University School of Medicine and from the Indiana State Medical Association to act in an advisory capacity in regard to the provisions of the Social Security Act. Dr. James Carter and Dr. E. O. Asher were appointed for the State Association and Dr. Matthew Winters and Dr. H. F. Beckman for the University.

(c) Letter from Dr. W. L. Green, Columbus, Indiana, concerning the Social Security Act, brought to the attention of the Committee.

(d) An age limit of thirty-five years is placed upon physicians who obtain positions as full-time health officers under the Social Security Act. "The age limit for health officers under the Social Security Act was set at 35 years with the thought that this would permit young men practicing medicine to go into public health work at a time when they are still young enough so that a new career will attract them." W. W. Bauer, M. D., director, Bureau of Health and Public Instruction, American Medical Association.

(e) Copy of the act and letter containing a summary of provisions received from the Committee on Economic Security, Washington, D. C., brought to the attention of the Committee.

(f) Bulletins issued by the American Medical Association in regard to the Social Security Act brought to the attention of the Committee. Previously copies of these bulletins had been sent to each member of the Executive Committee and to Dr. Asher and Dr. Carter, members representing the State Association on Dr. Harvey's special liaison committee.

(3) *Free Insulin Blanks.* A copy of this blank which has just been prepared in accord with the act passed at the last session of the legislature requiring townships to supply insulin free to citizens who are financially unable to purchase insulin brought to the attention of the Committee. These cards contain the following statement which is to be signed by the physician: "I solemnly affirm that the free insulin herein applied for is to be used for the person named above, and it is my belief after inquiry, that such patient is financially unable to pay for the same."

(4) *State Compensation Ruling on WPA (Works Progress Act.)* According to letters received at headquarters office physicians are to receive normal fees for medical services rendered under this act.

(5) *Annual Re-registration of Physicians.* Dr. F. S. Crockett, a member of the State Board of Medical Registration and Examination, has asked the Executive Committee for its opinion as to whether or not the subject of re-registration of physicians should be brought before the House of Delegates at this time. The Committee instructed the secretary to write Dr. Crockett stating that it feels that when and if this subject is brought before the House of Delegates information in regard to registration fees and how the profession in other states reacts to such fees should be available, as it is unlikely that legislation along this line could be enacted except at a regular session of the legislature. The Committee believes that some time and thought should be given to this subject.

(6) *Eight-hour Day for Nurses.* It was the opinion of the Executive Committee that this was no official affair of the Indiana State Medical Association, and the attorney for the Association was authorized to make such a statement in a talk before the State Nurses' Association at a meeting which will be held in the near future.

FERA Work and Indigent Sick

(1) Manual of Poor Relief Procedure compiled and distributed by the Governor's Commission on Unemployment Relief sent to county society secretaries and officers of the State Association.

(2) Manual on Medical Care from Ohio brought to the attention of the members of the Committee who had already been sent copies.

(3) Various complaints, both from the Governor's Relief Commission and from individual county societies, in regard to carrying out the FERA program, brought to the attention of the Committee. Mr. Charles Marshall, director of finance of the Governor's Commission on Unemployment Relief, is spending a great deal of time traveling throughout the state to hear and, insofar as is possible, settle complaints.

(4) Opinion of attorney of Association in regard to the right of a trustee to demand that physicians fill out order blanks for medical aid published in THE JOURNAL of the Indiana State Medical Association.

Socialization of Medicine and Sickness Insurance

(1) *High School Debates.*

(a) Letter received from Dr. R. G. Leland, stating that the Bureau of Medical Economics of the American Medical Association has prepared and has ready for distribution an article on the negative argument of the proposition "That the several states should enact legislation providing for a

system of complete medical service available to all citizens at public expense." This article is to appear in the annual Debate Handbook that is prepared by the National University Extension Association Debate Committee which is directing these high school debates.

(b) Suggestions of Dr. W. U. Kennedy, president, Henry County Medical Society. A copy of Dr. Kennedy's communication was sent to Dr. West and Dr. Leland of the American Medical Association and the members of the Executive Committee. The Executive Committee authorized the secretary to communicate with Dr. Kennedy and suggest that proper resolutions be prepared by Dr. Kennedy to be presented by the delegate from Henry county to the House of Delegates for consideration at the Gary meeting.

(c) Letter from Dr. L. T. Rawles, Fort Wayne. Dr. Rawles, who is a member of the Committee on the Study of Health Insurance of the State Association, has written a letter, copies of which have been sent to members of the Executive Committee. This letter gives information in regard to the procedure of carrying out in Indiana these high school debates and tells of the meeting that is to be held at Purdue University previous to the time scheduled for these debates.

(d) Bibliography from the Library of Congress upon the subject of medical care in the United States and foreign countries with special reference to the socialization of medicine, brought to the attention of the Committee.

(e) Dr. A. M. Schwitala, dean of the St. Louis University School of Medicine, and president of the Catholic Hospital Association, is a source to which high school debaters may be referred for material opposing the socialization of medicine.

(2) *Health Insurance.*

(a) Bulletin from Committee on Legislative Activities of the American Medical Association brought to the attention of the Committee. The members of the Committee asked Dr. Sensenich to place their names upon the mailing list to receive these bulletins.

(b) The Gradient Plan of the Committee on Economics, Medical Society of the State of New York. Correspondence giving this plan brought to the attention of the Committee. This material was turned over to Dr. Sensenich for study and report at the October meeting of the Committee.

(c) Copy of letter sent by Dr. B. S. Cornell, Fort Wayne, to his friends, in which he enclosed a brochure against sickness insurance prepared by the American Medical Association, brought to the attention of the Committee. The Committee was enthusiastic in its praise of Dr. Cornell's interest in this very important subject.

(3) *The Lenroot Survey, Terre Haute.* Attention of the Committee brought to this survey. Report made by Dr. Alexander of Terre Haute that when this survey was analyzed it was found that as far as Terre Haute was concerned the complaint was not against the attention received by patients from physicians but against an alleged fact that it was difficult for indigent patients to receive proper medicines and drugs.

X-Ray Examinations by State Sanatoria

Correspondence in regard to x-ray examinations being given at a county sanatorium to patients able to pay, for fees less than those paid for x-rays given by private physicians, brought to the attention of the Committee. As this had to do with a county and not a state institution, the Committee felt that it could take no further action than has already been taken in this matter.

Committee Appointed by Indiana Tuberculosis Association

The following Committee on Cooperation with the State Medical Association has been appointed by the Indiana Tuberculosis Association:

C. J. McIntyre, M. D., Indianapolis
W. M. Stout, M. D., Newcastle
E. M. Amos, M. D., Indianapolis

Hereafter when certain situations arise that may cause misunderstandings or need adjustments this committee, it is understood, is authorized to confer on behalf of the Tuberculosis Association with the committees of the Indiana State Medical Association.

Annual Meeting of Committee Chairmen, Councilors and Delegates to the A. M. A.

The committee chairmen are to be asked to attend a luncheon that will be held during the midwinter meeting of the Council and make reports to the Council at that time.

Program for Extension of Physical Therapy Education

Letter received from the Council on Physical Therapy of the American Medical Association in regard to the promotion of extension education in that branch was referred to the Bureau of Publicity.

Resolutions Passed by the Medical Society of the District of Columbia

These resolutions were referred to Dr. W. U. Kennedy of Newcastle for study.

Future Medical Meetings

(1) Annual Secretaries' Conference to be held the first Sunday in February, 1936, at the Columbia Club, Indianapolis.

(2) Midwinter meeting of the Council is to be held sometime early in January.

The Journal

(1) The Committee approved a cover of heavy white enamel stock, including one line in red ink on front cover, for the convention number of THE JOURNAL. The Committee also approved an expenditure of $1.50 each month for an extra wire stitch in the magazine.

(2) The Committee approved the purchase and the distribution of 1,000 souvenir key rings for those who attend the annual meeting.

(3) *Printing Contract.* As the Burford Company has agreed to continue for another year at the same rate, the Committee felt that there was no reason to open bids to other companies at this time.

(4) *Exchanges.* The Committee felt that the present policy of not exchanging with small county bulletins should be adhered to.

BOOK REVIEWS

BOOKS RECEIVED

CLINICAL DIAGNOSIS BY LABORATORY METHODS. By James Campbell Todd, Ph. B., M. D., Late Professor of Clinical Pathology, University of Colorado, School of Medicine; and Arthur Hawley Sanford, A. M., M. D., Professor of Clinical Pathology, University of Minnesota (The Mayo Foundation). Eighth edition, thoroughly revised. 792 pages with 370 illustrations, 29 in colors. Cloth. Price $6.00. W. B. Saunders Company, Philadelphia and London, 1935.

* * *

PREVENTIVE MEDICINE AND HYGIENE. By Milton J. Rosenau, M. D., Professor of Preventive Medicine and Hygiene, Harvard Medical School; Professor of Epidemiology, Harvard School of Public Health. Chapters by Abraham Myerson, Gordon M. Fair, John W. Trask, Carl R. Doering, J. Herbert Waite, and Eric M. Matsner. Sixth edition. 1512 pages. 172 illustrations. Cloth. $10.00. D. Appleton-Century Company, New York and London, 1935.

* * *

HUMAN PATHOLOGY. Howard T. Karsner, M. D., Professor of Pathology, Western Reserve University, Cleveland, Ohio: introduction by Simon Flexner, M. D. 18 illustrations in color and 443 black and white illustrations. Fourth edition, revised. 1,013 pages. Cloth. Price $10.00. J. B. Lippincott Company, Philadelphia and London, 1935.

INTERNATIONAL CLINICS. Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles by leading members of the medical profession throughout the world. Edited by Louis Hamman, M. D., visiting physician, Johns Hopkins Hospital, Baltimore, Md. Volume III. Forty-fifth series, 1935. J. B. Lippincott Company, Philadelphia and London, 1935.

* * *

BOOK REVIEWS

SURGICAL PATHOLOGY OF THE PERITONEUM. By A. E. Hertzler, M. D., Surgeon to the Agnes Hertzler Memorial Hospital, Halstead, Kansas, and Professor of Surgery, University of Kansas. 304 pages, with 201 illustrations. Cloth. Price, $5.00. J. B. Lippincott Company, Philadelphia and London, 1935.

This monograph is one of a series on surgical pathology of the various tissues of the body. To say that a monograph on a limited subject should be in every physician's library would be too broad a statement, but this book could, with profit, be added to the library of every doctor doing abdominal surgery. The review of the Developmental Anomalies of the right side of the abdomen alone makes this text worthy of serious attention, and the organization of the book, with its easy style and its clear explanations and illustrations brings one up to date on the latest thought in peritonitis, both specific and non-specific, the reaction of the peritoneal surface to foreign bodies, and the disturbances of mesenteric circulation. Reading the chapter on the mesenteric circulation gives one an excellent basis for a study of the modern concepts of the treatment of various types of intestinal obstruction. The reviewer repeats that this book would make a valuable addition to any abdominal surgeon's library, and is an excellent and up to the minute reference work.

* * *

SYNOPSIS OF GENITOURINARY DISEASES. By Austin I. Dodson, M. D., F. A. C. S., professor of genitourinary surgery, Medical College of Virginia. 275 pages with 111 illustrations. Fabrikoid binding. Price, $3.00. C. V. Mosby Company, St. Louis, 1934.

This book is all that the name implies. It covers the subject of urological diagnosis in 17 pages; a discussion of minor urological procedures occupies 19 pages, with discussions of similar lengths on non-tuberculosis infections, tuberculous infections, injuries, calculi, prostatism, tumors, and so forth. It has many illustrations, making it a splendid synopsis for the general practitioner.

* * *

BODY MECHANICS IN THE STUDY AND TREATMENT OF DISEASE. By Joel E. Goldthwait, M. D., Lloyd T. Brown, M. D., Loring T. Swaim, M. D., and John G. Kuhns, M. D. 281 pages; cloth; price, $4.00. J. B. Lippincott Company, Philadelphia, London, and Montreal, 1934.

In this book by Goldthwait and associates there is contained a most complete study of body mechanics so that, after reading it, one can see that no matter how much he already had believed that chronic diseases are influenced by body mechanics, he will have found that he had no conception of the real part that mechanics play. Posture, motion, muscle function, together with the end results of bachaehe, arthritis, diseases of the abdominal viscera with the consequent nervous system disturbances, all are plainly outlined. On the cover of the book is a statement which is very significant: "In a better understanding of the special structure and the special pathology of the individual and in a broader knowledge of the changing physiology that should be part of the varying mechanics of the body, the solution of the problem of chronic disease is largely to be found." It is a good book.

SURGICAL CLINICS OF NORTH AMERICA. Chicago number, June 1935. Volume 15, Number 3. 239 pages, with 119 illustrations. Issued serially, one number every other month. Per clinic year, February, 1935, to December, 1935. paper binding, $12.00; cloth, $16.00. W. B. Saunders Company, Philadelphia and London, 1935.

To review the June number of Surgical Clinics which is another Chicago edition, little need be said except that the publishers have selected material from Chicago's better known physicians. These physicians, in turn, have selected their material with care and have made this edition another worth while number.

* * *

DISEASES OF THE SKIN. By Richard L. Sutton, Sr., M. D., SC.D., L.L.D., F.R.S. (Edin.), Professor of Dermatology in the University of Kansas Medical School, in co-authorship with Richard L. Sutton, Jr., A.M., M. D., L.R.C.P. (Edin.), Assistant in Dermatology in the University of Kansas School of Medicine. Ninth Edition. 1,433 pages with 1,310 illustrations including 11 colored plates. Cloth. Price $12.50. C. V. Mosby Company, Saint Louis, 1935.

The fact that this text, since its first appearance nineteen years ago, has reached its ninth edition, speaks of the merit the profession has found in it, and the industry of the author in his attempt to keep it abreast with medical progress. It must give great encouragement to Dr. Sutton to see his sincere efforts so justly rewarded. In this newly revised and enlarged edition, Dr. Sutton, Sr., takes into co-authorship his son, who we hope will carry on with the same enthusiastic spirit of his father.

Herein the authors present for first inclusion in their text some twenty-eight additional entities, along with the revision of all other material, and in particular that of coccidioidal granuloma, taluremia, and the treatment of syphilis. In this latter division they present a schematic plan for the treatment of lues as suggested by Dr. Harold N. Cole, who, due to his extensive laboratory studies upon the various antisyphilitic drugs and due to his connection with the clinical studies of the Cooperative Group, is ideally equipped to speak on such matters. It is quite encouraging to see that all of these groups are combining in an attempt to bring some logical plan to antiluetic therapy and to rescue it from the general chaos in which it is drifting.

As diagnosis in the field of dermatology and syphilology depends greatly upon the physician's and student's visual education to differentiate one lesion from another, it would be an oversight to fail to commend the authors upon the fine selection of clinical photographs, which are so essential an aid in the recognition of dermatological entities, and the photomicrographs which through their portrayal of the underlying tissue changes, give a better understanding of the clinical picture and thereby lead to a more rational plan of therapy.

Finally, the structure of the book is good, leading through early chapters dealing with basic considerations of the normal anatomy and physiology of the skin; general etiological and pathological factors in cutaneous disease; the arrival at diagnosis through the correlation of physical and special examination findings, general symptomatology and historical points; general considerations regarding internal and external treatment in this field; and certain considerations of classification arrived at through recognition of regions involved and of the changes that are primary and secondary to the picture. From this point on, the various entities are discussed in detail under the more modern method of grouping such as hypercaemias, inflammations, hemmorrhages, hypertrophies, atrophies, anomalies of pigmentation, neuroses, new growths, diseases of the appendages, parasitic affections, and diseases of the mucous membranes adjoining the skin.

(Continued on page xx)

THYROID TESTS AT THE 1935 STATE FAIR EXHIBIT

(Continued from page 546)

This shows that the female normal group has its peak at about 130 to 140 and tapers off to 110 on one side and 180 on the other. The figures of larger reading, therefore, represent hypothyroidism, and those of smaller reading are of hyperthyroidism. The normal male group is similar except that its peak is about 150 to 160 with limits at 130 and 190. The abnormals fell into corresponding positions as can be shown by the following cases.

Four cases of rather obvious hyperthyroidism in males gave the following readings: 138, 132, 127 and 111.

Seven cases of hyperthyroidism in females show readings of 128, 125, 120, 102, 102, 094 and 077.

Two cases of hyperthyroidism in females gave readings of 190 and 196.

A dwarf Cretin gave the exceptional reading of 220.

There is still some doubt as to where the normal group leaves off and the pathologic begins. Therefore, there is still an uncertainty about borderline cases; however, the data indicate that it will be a distinct aid in the process of diagnosis of hyperthyroidism.

CLOSURE OF POST-OPERATIVE WOUND WITH IRRADIATED PETROLATUM

(Continued from page 490)

and put in dark containers. The irradiated petrolatum was warmed until liquefied and injected into the gaping wound by means of a large asepto syringe, and a dry dressing (sterile) applied. After the first application the redness around the suture openings began to disappear. After seven daily applications the wound was entirely closed with the exception of one area the size of a dime at the lower end of the wound. This area was filled in, but an over-abundance of granulation tissue was present. Epithelization was complete over this area after two applications of ten per cent silver nitrate. The wound then was entirely healed with a very moderate amount of scarring, and has remained firmly closed.

CONCLUSIONS

The healing of the wound in this case must be attributed to the irradiated petrolatum. Therefore, I believe the following conclusions may be drawn:

1. Irradiated petrolatum is a useful adjunct in the healing of wounds which fail to close after primary or secondary closure.
2. The material has very definite healing properties.
3. Irradiated petrolatum has uses other than in infectious processes alone.

906 Hume Mansur Building.

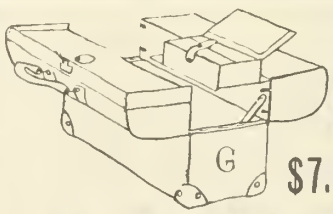
PROFESSIONAL PROTECTION

SINCE 1899 SPECIALIZED SERVICE

A DOCTOR SAYS—

"What hurts is to have a case like hers and put into it every care and service we are able to and then later have her get into the hands of some starving attorney and bring suit."

THE MEDICAL PROTECTIVE COMPANY
OF FORT WAYNE, INDIANA
WHEATON, ILLINOIS



Physicians' BAGS
$7.98 to $20
GAUSEPOHL TRUNKS
51 MONUMENT CIRCLE
Indianapolis

Important to Your Babies!

ACCEPTED AMERICAN MEDICAL ASSN.



Larsen "Freshlike" Strained Vegetables are first quality garden fresh vegetables cooked, strained and sealed under vacuum to protect vitamins and mineral salts. For further protection we seal in special enamel lined cans.

All Varieties 10c Per Can

LARSEN'S "Freshlike" Strained Vegetables

THE LARSEN COMPANY, Green Bay, Wis.

Kelēket

Announces

THE OPENING OF A NEW AND LARGER BRANCH OFFICE AT

1140 Hume Mansur Building
INDIANAPOLIS

(Telephone, LIncoln 2220)

INCREASING demands upon our services have made it necessary to enlarge our staff and secure more extensive quarters.

You are urged to visit our new Indiana home where you always will find interesting x-ray developments on display. Bring your x-ray problems to us—you will find a sincere spirit of conscientious helpfulness.

WHEN VISITING INDIANAPOLIS, USE OUR OFFICES AND SECRETARIAL SERVICES AS THOUGH THEY WERE YOUR OWN

SALES SERVICE SUPPLIES

The Kelley-Koett Co.
Incorporated
Covington, Kentucky

BOOK REVIEWS—Continued

(Continued from page 564)

PRINCIPLES AND PRACTICE OF MEDICINE. Originally written by the late Sir William Osler, Bt., M. D., F. R. S. Twelfth edition revised by Thomas McCrae, M. D., Fellow of the Royal College of Physicians, London, Professor of Medicine, Jefferson Medical College, Philadelphia. 1196 pages. Cloth. Price $8.50. D. Appleton-Century Company, New York, 1935.

Osler's Medicine has for many years been the yardstick by which all other single volumes have been measured. The recent edition, the twelfth, lives up in every respect to the high standards set by its predecessors as succinct authoritative discussions of medicine with particular emphasis on pathology and diagnosis. Treatment is discussed more fully than in some of the previous editions, and all of the recent recognized syndromes and disease entities have been given their full measure of attention.

It is with a sense of keen regret that one reviews this book, as the recent death of Thomas McCrae necessarily writes "finis" to a work which we have all admired and respected for so many years. Perhaps no other man has succeeded in greater measure than has Dr. McCrae in perpetuating the ideals of a master mind in medicine, and continuing in spirit as well as in letter the work of a great teacher. The book has long been a monument to both men.

COMMERCIAL ANNOUNCEMENTS

AVAILABLE LOCATIONS

GROUND FLOOR OFFICE, located next to drug store, available for young practitioner, rent free, in Vincennes. Write to Ray Smith, Smith's Pharmacy, Inc., Tenth and Main Streets, Vincennes, Indiana.

* * *

ASSISTANT wanted by established practitioner who will make a proposition to an interested eye, ear, nose, and throat man. Write to Box B, c/o THE JOURNAL, 1021 Hume Mansur Building, Indianapolis, Indiana.

* * *

RETIRING PHYSICIAN has splendid proposition for general practitioner. Prefer young man. For details, address Box E, c/o THE JOURNAL, 1021 Hume Mansur Building, Indianapolis, Indiana.

* * *

YOUNG PHYSICIAN wanted to work as associate with established practitioner who wishes to relinquish a part of his practice now. Address Box M, c/o THE JOURNAL, 1021 Hume Mansur Building, Indianapolis, Indiana.

* * *

SMALL TOWN wants young physician to locate. Good opportunity for one who can locate immediately to keep a practice established by a physician who has moved to a larger city. For complete details address Mr. Elmer Beall, Economy, Indiana.

* * *

YOUNG PHYSICIAN wanted to locate in small town; good opportunity for Catholic physician. For further information address Mr. O. W. Scott, Borden, Indiana.

* * *

EYE, EAR, NOSE AND THROAT SPECIALIST will find good opportunity in town of twelve thousand. Address Mr. W. N. Berryman, Peoples Life Insurance Company, Frankfort, Indiana.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

OFFICE OF PUBLICATION: 1021 Hume Mansur Bldg., INDIANAPOLIS, INDIANA

VOLUME 28 NOVEMBER, 1935 No. 11

ORIGINAL ARTICLES

THE DOCTOR'S PLACE IN HUMAN SOCIETY*

W. J. LEACH, M. D.†
NEW ALBANY

Science is the knowledge of facts proved by experimentation or observation. Each branch of science should have for its purpose the beneficence of the human race. Our basic sciences are but the outgrowth of knowledge of fundamental, natural laws which govern the universe as a whole. These natural laws are absolutely fixed and immutable, and brook no interference by any earthly power.

We may infer that the practice of medicine today is not purely scientific because there are still unproved methods and empirical opinions which have not been proved by experimentation or observation. However, in retrospection of the last three-quarters of a century, it is most encouraging to note the displacement of empiricism by rationalism; in other words, the adoption of natural fundamental laws for our guidance, which lead us nearer and nearer to an exact science.

Today we may say that medicine is the proud handmaiden of natural laws, whose purpose is the prevention and cure of disease. Our ability to coordinate our efforts will determine the degree of our success. We stand alone in the arena of conflict with disease and its causes, which is the most important field of human endeavor. Never should we encourage the idea, either privately or publicly, that we wield a magic wand or have any mysterious powers, as is the manner of some of the modern cultists, whose only purpose is financial or other gainful achievements. We must convince the public that comparisons are odious along this line. There are so many cults that they would doubtless adopt capital letter appellations for identification, had not the federal government beaten them to it. Had they done so, imagine the confusion among their pay envelopes in the mail bag!

Hippocrates, in his philosophic dissertations, predicted the inevitable decline of the Athenian mentality and the Spartan physique, and at once set about in a most rugged and individualistic manner to break down the barriers and emerge from the great wilderness of superstition, mysticism, ignorance, and religious idolatry, leaving sun-gods and totem poles to the irretrievable. He tried to follow the lead of his own inherent philosophies, which he co-ordinated with his daily observations. As this was in the pre-scientific era, this great father of medicine had naught to guide him except his own concept of natural laws, upon which he gradually built and proved those philosophies which he so faithfully and ethically bequeathed to his followers. His ideals and ethics became traditional, and remain fundamental today. What a tribute! No doubt the great patriarch experienced most tensive emotions when he bade farewell to the dicta of Aesculapius and his two daughters, Hygeia and Panacea, which were the most respectable of his racial ancestry along these lines.

A most remarkable fact is that today, after twenty-four hundred years, many modern medical authorities quote from the observations and deductions of Hippocrates, often in confirmatory accents. His genius was not only expressed in the healing art, but in moral philosophy as well, as is evidenced by his code of ethics which remains extant today. His philosophies were alluring and fascinating, and the master minds of Europe and parts of Asia embraced them with anxious interest, all of which served to impregnate the better countries with the seeds of medical science and ethics.

With the decline of the Roman empire, and the following dark ages, there was little of anything

* President's address prepared by Dr. Leach and read by President-elect R. L. Sensenich, M. D., before the annual session of the Indiana State Medical Association at Gary, October 9, 1935.

† Died September 29, 1935.

cultural accomplished, but after the dark ages and with the dawn, there appeared through rifting clouds of oblivion the face of grand old Hippocrates to cheer and comfort languishing civilization. Such was the origin of our present-day medicine.

During the early centuries of modern civilization, medical progress was extremely slow and tedious. General education was at a very low ebb, and superstition and mysticism were the natural heritages of the populace. Incidentally, its prevalence today is quite discrediting to our boasted civilization. In those early centuries, rapid dissemination of new and important facts was not facilitated by intimate contact or through the medical press or any of such devices of communication as exist today. But finally, Hippocratic medicine found its way into the modern world in streamer-like fashion, and in the process much of the useless has been discarded and much new fact-finding has been added. An accurate and detailed history of medicine to date would fill many volumes.

What of the specialties in ancient and medieval medicine? As culture began to revive after its woeful downfall, many men attacked the disease problem through special lines. For instance, Galen worked especially along the lines of pharmacology and anatomy. An Arabian genius, long before, had assembled no less than six hundred botanical remedies, some of which are in use today. Some mastered in anatomy, others in physiology. Harvey, for instance, discovered the greatest pumping station in the world, which supplies motive power for the channels of nutrition and elimination of animal life. We also read of great obstreticians and surgeons. Physical culture was not lost sight of in an effort to improve health, by the Greeks and Romans of earlier days. Many pursued Hippocratic clinical medicine. Unfortunately, most of these old masters in their lines were arrogant and jealous of each other, and that attitude only served to slow the progress of scientific medicine. Much more could have been accomplished if there had been coordinated endeavors such as we have today in our medical societies and medical press; also, we have a better educated public with which to cooperate.

Aristotle, that great philosopher, one of Hippocrates' contemporaries (of which he had no less than ten), was asked to define lightning. His answer was, "Energy," and probably no better definition is available today. In those days lightning was a Greek god, as was every other thing which displayed terrible and destructive force. But note what the basic sciences have done with this Greek god of energy! Again from carbonaceous deposits, such as coal, the basic sciences have developed a family tree of by-products numbering in the hundreds. Modern chemistry of the human body has also developed hundreds of formulae—changeable, interchangeable, and fixed. The same is true of foods and drugs. It is due to a knowledge of these intricate and complex chemical reactions and the development of medical and surgical technique that the average length of human life has advanced from eight to fifty-eight years. Chemistry and physics, which are a sort of Siamese twins, dominate life from inception to decadence. Whenever the basic sciences move forward a pace, scientific medicine plays the graceful accompaniment and is woven into harmonious scientific progress.

This reminds us of the logical urge for more fundamental science in the training of physicians in pursuance of the infallible rule that the firmer foundation makes possible a greater super-structure. Indeed, it is a laudable purpose. Let us hope that it will not thrust too great a hardship on those very able and worthy young men who are too limited in financial resources to undertake the task. However, let us not forget that human endeavor along all lines is striving arduously for the highest peak of success. The medical profession stands guard over human welfare from intrauterine life to belated senility. The success of society as a whole largely depends upon the progress and success of medical science. Also, let us not forget that the young physicians are the dependable medical profession of tomorrow, and if their batting average is to be high and home runs are to be the rule, training must be increasingly intensive.

No young man today could reasonably enter the study and practice of medicine for the sole purpose of financial success, nor could his object be ease, luxury,or personal popularity. Only one object could be reasonable: namely, the love of science and human welfare. Then he must trust to luck for compensatory equity for a livelihood. We have been told that the average annual gross income of physicians in the United States is about two thousand dollars. The reason that the medical man of today is so fascinated and so lured by the study of his profession is that, during the last fifty years, intensified research in the allied sciences has developed so much fundamental and basic means for the fusion therewith of scientific medicine that there seems never a stand-still moment in the progress of present-day medicine. All of this supplies the normal and irresisitible stimulus to utilize the sum total of combined progress for the improvement of the human race—physically, mentally, and socially.

Recently a fine young man applied to me for information and encouragement regarding the study of medicine. This young man was then earning one thousand dollars annually, and he had a promising future which indicated that he would earn in salary at least ten thousand dollars during the following seven years. During those seven years he must sacrifice his salary and have an additional expense of approximately seven thousand dollars, which would make his capital stock or net investment total seventeen thousand dollars. That figure includes as yet no office or motor car equipment with which to earn a livelihood, which items would add fifteen hundred dollars more. Then he must face a period of skimpy living and low income. I warned this courageous young man that

he would have to be one of the keenest and cleanest young men in his community to be able to matriculate in any A-1 school, such as Indiana University. I further warned him that, in these ruthless days of infelicity, he would be stigmatized as mercenary and selfish by a considerable portion of the general public, and that attitude is due to the most unjust and ill-advised orgy of vicious propaganda ever instituted against good citizenship. I said, furthermore, that this propaganda evolved from the minds of a few arrogant socialites who sit in high places and feed luxuriously from the funds of well-intentioned dead millionaires; and these socialites at once pervert the very intent of the most laudable philanthropic purposes of the donors, and, without blush or shame, allow these agencies in iconoclastic fashion to destroy the traditional ideals and prestige of the most beneficent profession of modern and ancient times. Would that not remind you of what Cassius said to Brutus, "Upon what meat doth this, our Caesar, feed, that he grows so great?"

They do not discredit our scientific achievements but arrogantly claim the right to regale us with a habiliment of identity for convenient regimental direction. In other words, they would tell us when, where, and how to practice medicine, and what should be our recompense. Now, does the milk maid kick the cow in the belly to increase her yield of milk? No; she gives the cow more food!

As I have indicated, this Epsteinian heresy and all of its kindred ilk did not originate among the indigent or helpless, but the various apostles and disciples of this heresy have nosed their way through the back doors of well-meaning and unsuspecting people throughout the land, thereby creating confusion of tongues and consternation of thought. The riotous upheaval has been predicated upon the apparent fact that a doctor here and a hospital there did exceed the bounds of discretion in their charges, whereupon the adroit perverters of facts seek to place the faults of a few exceptions at the door of the legitimate medical profession and hospitals en masse.

The medical profession was well vindicated by the minority report of that notable committee for the investigation of high cost of medical care and hospitalization, but that minority report was only published in the medical press, which the laity never reads, while the majority report, which was made up largely by cunning laymen, was heralded most extensively to the lay public (through the expenditure of funds of easy money) by public press, lay magazines, and radio broadcasts. That majority report secured a preponderance of publicity, but the medical profession had no funded millions for a just defense; hence, the disparity in final results. Furthermore, there were thousands of physicians who never even read the minority report! Is it any wonder that our prestige has suffered? Did Judas Iscariot incriminate the other eleven apostles? No; he paid his own penalty, and the gold-digging doctor will pay his, also. There are thousands of other doctors who leave much of their legitimate earnings upon sacrificial altars with charitable grace. Radicals wail loud and long amid thunderous applause, but the conservatives merely moan in their lethargy, then turn over on their sides and go back to sleep. The lamb-like inbetweens complacently follow the bell wether, who always knows where the grass is greenest and who is the high priest of selfishness of his flock.

The foregoing episodes of this social drama serve only as the skeleton around which the socialists and communists desire to build an arachnoid stratagem by which to ensnare not only the vulnerable-minded of the general populace, but the ambitious one-track-minded politician as well, and by so doing fuses this amalgam of a large portion of the general public, who seem to have a low sense of social responsibility, into a concrete dead-weight majority of rubber stampers at the polls of common suffrage, buoyed and encouraged by fallacious promises of easy living, work or no work. The success of this socialistic project will depend upon how well they succeed in fusing the radicals and the politicians into a common agreement. Politicians are like other folk and have their weak moments, and especially do they crave patronage and continuance in office. Their election should reflect the grade of intelligence of their constituency. If our politicians were all statesmen, as well, there would need to be no fear in this conflict, but the statecraft in this country is very ill—nigh unto death, and needs a good doctor. Most efficient remedies may be found in the archives at Washington, D. C., where we may consult Washington, Jefferson, Franklin, Lincoln, Cleveland, etc. And yet today their teachings are ignored and violently rejected by some of our great universities.

This strong vein of radicalism and sometimes communism has been amalgamated and fused into our original Americanism until the subject will not longer stand close scrutiny. Since we have succeeded in smoking out and into the open many aristocratic and luxuriously compensated agencies of this ill-advised and mischievous propaganda tending to state medicine, the logical method for defeating its purpose is to attack it all along the lines of its activities—not with lollypops and popcorn balls, but with heavy artillery, manned by the most intelligent men and women in this country. High-sounding socialistic phrases and professional eloquence cannot long endure against justice and well-proved facts before an intelligent public. But we must present the facts to the people and undo the prejudices which are due to noisy, one-sided publicity. We must convince the public by precept and example that we have not relented in our traditional generosity, nor have we lessened our vigilance in scientific research, but have always had for our object the welfare of the human race. Politicians are very intelligent and

would prefer to sponsor the right side of this question, and they could be a great help to us in this fight to break the fusion of politics with propaganda. Unjust propaganda cannot win without political fusion, but propagandists often coerce politicians and political parties. This is our greatest danger, and in our case, our only security lies in thorough education and training of a large majority of the general public. That is exactly what those aristocratic socialites are cleverly doing today, while physicians, in pursuance of their traditionally dignified and cultural habits, quietly suffer the evils of each day without protest, forgetting that God only helps those who help themselves.

The educated and trained influence of one hundred and fifty thousand physicians, with their families, friends, and loyal patients, can control a very great majority of the voting public in the United States along this line. Politicians who find it easier and more pleasant to be with a great majority in a just cause would come to us on the first band-wagon, and any good lawyer or politician, if imbued with American statecraft with a just cause to plead, would find it great sport to oppose any college professor who espouses an unjust cause, even though his professional highness be subsidized by bequested millions. Even the cultists, as they stand on the side lines viewing the battle, may find their go-carts loaded with literature backing away in reverse gear, and conclude that it is a good season for apostasy, and that the angels' treadway is dangerous for fools. As we enlighten the general public, we rob the cultist of his raw material.

If some of the faint-hearted lack the courage for this conflict, let us remind them that as the great McDowell of Danville, Kentucky, did the first ovariotomy to rescue his patient from suffocation, he well knew that the cabin was surrounded by hoodlums armed with clubs and pitchforks with which to take his life if he should fail or his patient should die on the table. That was courage. Forget not that the fittest survive only through the courageous exercise of the inherent impulse of self-defense. Slothful efforts at defense always suggest guilt. These perverters of truth and purveyors of prejudice can easily be chased back over the same *pons asinorum* over which they came, if we put the same energy into it that they did. The difference is that they got paid for the job in cash, while we must do it for the sake of professional pride and security. Finally, to be successful in the campaign for professional independence and security, we must maintain a more perfectly organized profession within the county societies, which are the fundamental units throughout forty-eight state associations and the American Medical Association, so that there will be no division of plan or purpose, but they will speak as one voice, which may be recognized as the American medical profession.

THE CLINICAL ASPECTS OF FRONTAL LOBE DISEASE*

LOUIS J. KARNOSH, M. D.
CLEVELAND, OHIO

The frontal lobe has recently become of great import to both the psychiatrist and the neurosurgeon—to the first because its pathology brings forth a most complex and subtle system of mental disorders, and to the second because it is so often the site of infiltrating gliomas, of overlying meningiomas and hematomas, and of underlying prechiasmal tumors.



LOUIS J. KARNOSH

Extirpations, partial or complete, such as those reported by Dandy,[1] Gardner,[2] Penfield[3] and others, afford an excellent opportunity to look into frontal lobe function and in many respects are to be preferred to cases due to trauma or vascular softening, where the clinical picture is often blurred by diffuse brain disease.

Animal experimentation on the frontal lobe contributes practically nothing, not only because this portion is rudimentary but because animals cannot furnish subjective data. In surgical removal of the human frontal lobe, in a few selected cases where the lesion is carefully excised, where treatment and good fortune has allowed a survival, and where cooperation on the part of the patient is possible, the nearest ideal to sound physiological experiment is attained. Even under such favorable conditions, the experimental protocol is weakened by many errors and omissions.

Goldstein[4] summarized the much contested symptoms of frontal lobe disease and emphasized the disorders of attention, the difficulty in grasping essentials, changes in character, the lowering of ethical standards and inability on the part of the patient to adjust himself to unusual or changing situations.

In reviewing forty-four cases of frontal lobe lesions, mostly tumors, Sachs[5] regards mental changes as among the most dependable signs, these being a loss of memory for recent events, indiffer-

* Presented before the General Meeting of the Gary session of the Indiana State Medical Association, October 9, 1935.

[1] Dandy, Walter E.: Removal of Right Cerebral Hemisphere for Certain Tumors with Hemiplegia; Preliminary Report. *J. A. M. A.* 90:823-25, March 17, 1928.

[2] Gardner, W. J.: Removal of the Right Cerebral Hemisphere for Infiltrating Glioma. *J. A. M. A.* 101:11, p. 823, September 9, 1933.

[3] Penfield, W., and Evans, J.: The Frontal Lobe in Man—A Clinical Study of Maximum Removals. *Brain* 58:1, p. 115, 1935.

[4] Goldstein, K.: *Med. Klinik*, 1923, No. 28.

[5] Sachs, E.: Lesions of the Frontal Lobe. A Review of 45 Cases. *Arch. Neur. and Psychiat.* 24:4, p. 735, October, 1930.

ence as to the gravity of the illness, and at times euphoric states or periods of depression. In analysis of 314 cases of microscopically verified primary tumors of the forebrain, Voris[6] of the Mayo Clinic found 63 with definite mental disorder. In this series psychic symptoms were only slightly more frequent in lesions of the left frontal lobe than in lesions of the right lobe.

To make clear the anatomical visualization of what is meant by the frontal and prefrontal portions of the brain, consulting Campbell's cytologic zoning of the cortical areas will show that the parts in question occupy a good anterior two-thirds of the three frontal convolutions. In Brodman's scheme, which is used by the German neurologists, we are referring to areas eight, nine, ten and eleven. Penfield's recent topographical studies outline this area as everything anterior to his so-called epileptogenic zones, implying by this that irritation of any part of the frontal area rarely causes any twitchings, spasms or convulsions of voluntary muscle—in this sense being a silent area.

From the few bilateral and unilateral lobectomies studied before and after operation, a general theory of frontal and prefrontal brain function has been developed. Brickner[7] made very extensive studies of two patients who survived a bilateral frontal lobe removal and expressed the theory as follows: Simple combinations of images, concepts and ideas, memories and other simpler mental phenomena, which for the sake of brevity can be called engrams, are seated in the occipital, parietal and temporal lobes. The frontal lobes receive these simpler engrams and combine them into constellations more complex. This function manifests itself as deep thinking, good judgment, careful deliberation, the power to concentrate and to form abstract ideas—in other words "the long haul in thinking." Consequently if this function is well developed, difficult situations confronting the individual will be more elaborately analyzed, compared and classified and there will be correspondingly less need for a short-circuited reaction through primitive, impulsive and emotional mechanisms. In this sense we regard the frontal lobe as an inhibitor of the instinctual and emotional life of the individual.

If the frontal lobes are removed or injured there should therefore be (1) an absence of the ability to make complex engrams; (2) a reversion to simpler, more spontaneous and child-like thinking, and (3) a tendency to cruder and purer emotional toning such as clear ecstasies and simple depressions or a rapid swing from one to the other, and (4) a greater freedom of expression of instinctual and emotional drives, unhampered by the necessity for pause and deliberation—all these combining to produce conduct and behavior of a low ethical or antisocial quality.

In ordinary contact such patients may pass for normal. Normal perceptual powers, the ability to form simple concepts and to answer routine questions are well preserved and generally the intelligence quotient is not depreciated. Only under the stress of making more elaborate adaptations will there be an outcropping of the fundamental defects. Distractability, lack of prolonged interest and perseveration are then manifested and there may be in the face of sober and difficult situations a tendency to facetiousness and clownishness. Penfield was impressed by the lack of initiative in several of his patients, and several post-operative studies emphasize a tendency to emotional torpor, a smugness, and a disinclination to assume even the most trivial form of mental effort.

De Morsier[8] describes a more delicate delineation in prefrontal lobe pathology, resembling somewhat the situation in the second case presented in this discussion. The patient had a bilateral softening of both prefrontal lobes. He suddenly became obtunded, somnolent, confused and blind. Presently he could recite all incidents in his life clearly up to the time of the vascular accident, but he did not show the slightest knowledge or concern over his condition. When not questioned he was apathetic to everything. Sudden outbursts of humor would occur—now ironic, now almost virulent, demonstrating a definite swing in mood.

In prefrontal and frontal lobe lesions, neurologic data are generally scanty and inconstant and one questions whether such objective findings when they are found are really genuine manifestations of frontal pole disease. The forced grasping and groping phenomena so often discussed are generally absent and good examples of this have been described in lesions of the temporal lobes. The ataxia attributed to frontal lobe disease is more constant; there is a caloric irritability of the opposite labyrinth and pass pointing is found in the contralateral extremities. In pure lesions of this area there are rarely disorders of speech or conjugate movements of the eyes, and writing is not ordinarily affected, although such defects are encountered where the process advances into the prerolandic portions of the cortex.

The three cases are presented not only because they present a widely different etiology but because the lesion has been well away from the strictly motor areas and has been definitely restricted to the so-called silent portions of the anterior pole of the brain.

CASE I: An Italian woman, of fifty-four years, struck her forehead ten years before against a heavy table and two years later developed a swelling at that site. This gradually took on the consistency of a solid fibrous tumor which was surgically removed but recurred within a few months.

[6] Voris, H. C.: Tumors of Frontal Lobe of Brain: Anatomic, Pathologic and Clinical Analysis. Proc. Staff Meeting, Mayo Clinic 9:396, July, 1934.

[7] Brickner, R. M.: The Role of the Frontal Lobes in Intellectual Function. A Study Based upon a Case of Partial Bilateral Frontal Lobectomy. *Jour. Nerv. and Ment. Dis.* 79:4, p. 436, April, 1934.

[8] De Morsier, G.: Le Syndrome Prefrontal; L'Amnesie de Fixation. *Encephale* 24:20, January, 1929.

Six months before admission to the hospital she was given intensive local x-ray treatment and this was followed by the anchorage of radium seeds into the ulcer which developed at that time.

At the same time that the process became ulcerative, she began to manifest a change in disposition. She became irritable, brooded a great deal and sat for long periods in mental torpor, apparently listening to the radio. After two months of this desuetude she entered suddenly into an euphoric state, showing a great pressure of activity, expressing a desire to go back to Italy and spend a great deal of money, which she did not possess, and shortly became violent, requiring incarceration in a psychopathic ward.

The forehead was the site of a deep ulceration and perforation of the bony tissues. X-ray revealed a penetration by the process of both inner and outer plates of the frontal bone. Encephalograms were made and the cortex in the prefrontal portion of the brain was very irregular and distinctly atrophic. Biopsy of the pathologic lesion proved to be a fibrosarcoma. The opinion was offered that the cerebral defect was due to the combined effects of invasion by tumor, of x-ray treatment and radium seed implantation, probably resulting in a reactive gliosis in the brain tissues.

Prior to her illness this woman was a stable, sober and sensible woman who had never before been subject to violent mood fluctuations. She had passed through the menopause with no sign of psychotic tension, and at no time manifested any trends to abnormal conduct. During her upset there were no objective neurologic symptoms. It can be argued, therefore, that in this case, forebrain disease was responsible for a labile mood state resulting in a manic-depressive psychosis. The patient continued for several years to cycle from one phase to the other and still is subject to abnormal mood fluctuations to the present time.

CASE II: A male, fifty-four years of age, a watchman by occupation and having a reputation for being a sober, patient, colorless, and substantial citizen, was shot through the forehead by his wife. No better index of the man's steadfast and all-suffering temper can be cited than this: For several years his wife, who was a sexual paranoiac, was wont to accuse him every morning of having "carried on" with a paramour. He had been advised to have the woman incarcerated, but chose to tolerate the situation and made no complaint. One morning, after making her usual charge, she stepped to a highboy and drew forth a gun and shot him. The bullet entered the left orbit, penetrated the roof of the orbital fossa and passed through both prefontal areas. The patient fell down, was blinded at once, and never at any time came to realize that he had been shot. He informed his family physician that he had accidentally fallen down and was blinded by plaster.

For eight days he was irrational, after which he regained considerable sensorium but now became vulgar and profane—a change in personality entirely foreign to him. Two weeks after the accident he developed a true manic phase, becoming euphoric, elated over trivia and planning all sorts of grandiose schemes. He talked incessantly and was in no way impressed by the fact that he was totally blind. His insight into his condition was nil. Without showing any signs of sepsis, menin-



Figure 1. Case I: A fibro-sarcoma perforating the frontal bone. Encephalogram shows atrophy of frontal lobes, as indicated by the accumulation of air about the anterior poles.

gitis or paralysis, he suddenly expired on the twentieth day after the injury.

The autopsy revealed no meningitis or hemorrhage, and the mechanism of death remains obscure. The lesion was restricted entirely to the prefrontal areas. There was a slight tear in the sagittal sinus and through the extreme anterior portion of the falx, but no large artery was traumatized, and there were no areas of secondary softening.

In this instance an injury of the frontal poles resulted in a violent personality change transforming a docile, emotionally stable individual into a violent and vulgar manic. Again objective neurologic data were wanting, although it must be conceded that such signs may have been present but the patient's mental condition prevented the cooperation necessary to elicit them.

CASE III: A fifty-two year old woman was admitted to the Cleveland Clinic on June 22, 1933. Three years before she had a severe convulsion lasting several hours. At the time she had no neurologic symptoms and it was believed she had a diffuse vascular disease, because she had a mild arterial hypertension. Two years later she had a recurrence of her convulsions. She then began to complain of fatigue, could not concentrate on her household duties, and at least once had an attack of vertigo which caused her to turn completely around five or six times to her left—a peculiar form of circumpulsion which has not been previously regarded as a frontal lobe sign.

On examination her discs were found to be choked. The spinal fluid was xanthochromic and there was a pressure of 260 mm. In the belief that this was a subarachnoid hemorrhage, a right subtemporal decompression was done, but no bleeding points were found. Instead an encephalogram revealed an infiltrating process of both frontal lobes. The right frontal lobe was removed on August 28, 1933, this being obtained in several pieces and weighing in all about 110 gms. after formalin fixation. The tumor, which was recognized as an oligodendroglioma, had penetrated the falx and had invaded the opposite or left frontal lobe. On September 8, 1933, the left frontal lobe was taken out along with the adjacent portion of the falx. Dr. W. J. Gardner, who performed both operations, was of the opinion that the line of section was parallel to and about 3 cm. anterior to the rolandic fissure, thus sparing the motor and the speech areas. It is probable that we are here dealing with a case in which the larger part of both frontal and all the prefrontal areas of Campbell are absent. After a stormy course, complicated by an infection with a diptheroid bacillus, for sixteen months she was in a remarkably good state of health but, of course, a very much sheltered and carefully supervised woman.

Prior to the onset of her tumor symptoms, she possessed one of the most jovial dispositions, was generally alert and quick in retort. She had a good disposition, was never a nagger or scandalmonger, for she despised such qualities. Fond of her home, she kept it in apple-pie order, yet she managed to keep up with current events and greatly enjoyed magazines and the radio. She was not known to have periods of moroseness even in her premenstrual phases.

Ten days after the second operation she began to respond to questions with monosyllabic answers. She never asked for food but ate what was given her without comment. Almost at once she recognized the members of her family and a few close friends by name. Six weeks post-operative she was able to sit up and a month later she could walk with one person aiding her, but on insisting that she be allowed to walk unaided, she fell after managing to get halfway across her bedroom. Sphincter control was not regained until three months later and there were several relapses into a total incontinence during the following year.

Six months after the bilateral frontal lobe decerebration, extensive psychiatric and neurologic



Figure 2. Case II: Showing gunshot wound through the inferior portion of both frontal lobes. The arrow indicates the course of the bullet. The patient became blind at once, but survived the injury for seventeen days. The brain was otherwise normal.

studies were made upon the patient, and because of the unusual circumstances the clinical picture is not without considerable interest. A resume of the high spots in the examination is submitted in compact form.

Disposition and Emotional Qualities: Most outstanding is a pronounced fluctuation in mood. Before her illness she was a soft-hearted, sentimental woman, but level in her disposition; she now shows periods of depression when she broods, wants to be alone, and refuses or is unable to answer the simplest of questions, and her sphincter function is poor. During such periods when conversation is encouraged she seems to grope for words and bursts into tears when she cannot find a satisfactory medium of expression. Again she suddenly manifests her old spirit of joviality and actually feels "too good." During these phases she becomes euphoric, loquacious and indulges in many retrospections about her girlhood days. Speech now seems to be fluent and easy and she frequently laughs in an unnatural and semi-hysterical manner at most anything. The nurse deliberately tries to aggravate her during her euphoric states but the patient manages to turn such strategy into a joke.

Memory: During her periods of good feeling her memory is extraordinary. She talks of vacation trips taken two years ago and without elicitation she recalls the birthdays of relatives. She points to a chime clock hanging on the wall, which she purchased in 1925, and gives the accurate purchase price. In reference to her mother, the patient shows the greatest falsification of memory, frequently calling for her, forgetting that she passed away in 1928. In her happy states she seems to recall events of a pleasant nature only; in her fits of depression, if anything, she recalls incidents of a morbid nature.

Judgment: This has not been adequately tested for the obvious reason that the patient has been spared from making any important decisions, facing any important problems or crucial situations. She naturally has not been informed as to what portions of her brain have been resected, and she shows no great concern. Only during her depressed states does she give any evidence that she is concerned about her future or about the financial status of the household. Only once did she inquire as to the cost of her illness, and then she dropped the subject in a few moments to discuss something else. She is not highly concerned about her son's staying out late at night—a great deviation in this respect from her former self. Very frequently she becomes rather facetious about serious matters and refuses blankly to give them any attention.

Concentration: This is decidedly limited. She reads the paper but is not able to associate the items in an article or recall them in any consistent fashion. She makes pathetic attempts to help the cook about the kitchen but flutters from one task to another, being able to accomplish little or nothing. Very much like Penfield's own tragic case, she is seized by panic whenever she attempts to plan a meal and becomes radiant when someone else itemizes the menu which she is to prepare.

Orientation: This is not seriously affected. On auto rides she recognizes all important public buildings and knows where she is in a spatial sense. She keeps up with the calendar very well. She identifies most of her old friends but frequently gropes for the names, although several hours later she recalls them successfully.

Neurologic Aspects: As stated before, she has intermittent lack of sphincter control. Her gait has improved but she still shows a sway in all directions and requires help in walking. She walks the stairs with little difficulty if she can support herself against the rail. She dresses herself piecemeal and with suggestions from others as to the order in which the apparel is to be put on. She washes her own face and hands. She handles a knife and fork very well and has no difficulty in chewing and swallowing. She wrote a letter to her son, the handwriting being normal and the content natural. She does not complain of muscular weakness or vertigo even though she is ataxic. All facial movements, voluntary and spontaneous, are symmetrical. The finger-to-nose tests are well performed and there are no abnormal grasping reactions in the hands. Knee jerks and ankle reflexes are symmetrically hyperactive, but there are no pathological plantar responses.

Pharmacodynamic studies have not been carried out to any great extent, but it might be said in passing that luminal depressed her profoundly and increased her ataxia. Bromides seem to have the same effect but caffein had no abnormal or exaggerated stimulating influence.

In summary it can be said that here again in a bilateral absence of the frontal lobes, neurologic signs were minimal and the outstanding defects were in the higher mental functions. A marked change in personality in the direction of labile mood state, blunting of the functions of insight and judgment and the loss of the power of prolonged application of mental effort were clearly demonstrated.

CONCLUSION

Frontal and prefrontal brain disease, whatever the organic bases may be, produces a nexus of symptoms which for the present are predominantly of psychiatric rather than of neurologic nature. A tendency to sharp cycling of mood appears to be the most common denominator, hinting at the mental mechanisms which are responsible for manic-depressive psychosis. Other features which are commonly encountered are a loss of insight and lack of concern about health, a failure to form complex mental organizations, but no great impairment of the powers of simple perception, ordinary memory and the receptive and expressive phases of speech function. Occasionally there may be convulsions and almost always there is some degree of ataxia.

THE MANAGEMENT OF THE INFANT DURING THE FIRST THREE MONTHS OF LIFE*

ISAAC A. ABT, M. D.
CHICAGO

INTRODUCTION—BIRTH

A normally born infant is one who is safely delivered, and in whom no trauma has occurred, the infant being mature and of normal stature and size. The baby should also show early evidence of a good constitution. Vague as this term is, it nevertheless implies a condition of the individual which is the product of inherited factors and the influence of environment.



ISAAC A. ABT

An infant with a good constitution is one who shows no evidence of physical or mental inferiority, and whose organs function normally. A baby with a strong constitution takes artificial food, properly prepared, without unfavorable reaction, and develops normally. Such an infant shows considerable resistance to infection, and does not react unfavorably to slight exposures. If he falls ill the symptoms are mild and he recovers rapidly, in comparison with an infant of inferior constitution similarly affected. It is not possible to make an immediate appraisal of the constitutional state of the infant unless, perhaps, there are manifest signs of degeneration in the parents or their immediate families. It is important to ascertain the health and constitutional qualities of the baby's forebears, the age of the parents, the infant death rate in the family, and the health of the parents during their infancy and early childhood. Infants may be born slightly underweight, or diminutive in size, though otherwise normal. Their little bodies are well proportioned, turgor and tonus are normal, the skin is rosy or pink, and these infants are agile and cry lustily. They often develop rapidly in weight, the head may remain comparatively large for a time—they progress normally.

Some infants are not only born markedly underweight, but soon show diminished tonus and turgor; they are hypotonic and show no strength in their bodily movements; they whine when awake, in a complaining manner; their skin is often edematous, yellowish, and sometimes bluish. Such infants are a source of anxiety to parents and physician. They are, as a rule, in urgent need of breast feeding; under a carefully supervised regime they may be nursed to health, though there may be frequent upsets.

This delicate condition of the infant may be due to a number of factors: (1) congenital syphilis; (2) birth injuries—hemorrhage into the brain—hemorrhages into the spinal cord or internal organs. These injuries during birth may cause death by asphyxia. In other instances, intra-uterine influences such as maternal toxemia, or infection, cause underweight as well as inferior types of infants who remain delicate and are difficult to rear and difficult to feed.

The subject, management of the infant during the first three months of life, teems with possibilities for discussion; so many problems present themselves for consideration that one must naturally limit the field to be covered. The infant after birth requires medical attention during both health and disease—and more than this, he requires thought and consideration before birth—the so-called prenatal care.

There are numerous causes for the premature death of the infant; the most important are syphilis, and the toxemias of pregnancy. The toxemias of pregnancy are a great hazard to the fetus, and are liable to lead to a series of disturbances after birth. In 1925 I studied the influence of the toxemias of pregnancy on the newly born babies at the Chicago Lying-in Hospital through the kindness of Dr. Joseph B. DeLee. The records of 210 women suffering from this condition were investigated with the view of ascertaining the effect on the baby. The study showed that, of the number of records examined, 39 infants were born dead (27 of these were still born, 12 were macerated). A considerable number of infants were born at full term—a larger proportion were premature; this is the outstanding result of the maternal toxemia on the fetus. The infants who were born dead, or who died shortly after delivery, showed hemorrhages into the internal organs. These changes resemble those found in eclamptic mothers who have come to autopsy.

In the infants who were viable, convulsions occurred only five times, and those who were born at full term, and survived, seemed to show no permanent effect from the maternal toxemias.

The practical application of such investigations is that mothers should go to their physicians early in pregnancy to receive prenatal care and advice. Careful attention may do much to diminish the risks of labor, not only for the mother, but also for the baby.

THE NEW-BORN PERIOD

During this period the infant is subject to accidents and injuries associated with birth, malformations, and also to diseases and infections.

Before we proceed let us pause for a moment to summarize briefly some of the points in the care of the newly born infant. The management of the

* Presented before the General Meeting of the Indiana State Medical Association at Gary, Wednesday, October 9, 1935.

newly born infant is of great importance, because thereby asphyxia or subsequent respiratory disease may be prevented. As soon as the child's mouth passes over the perineum, the oral cavity should be gently wiped out with the rubber-gloved finger. When the head is delivered this manipulation should be repeated. Should the mucus persist in the infant's mouth, the removal with the rubber-gloved finger should be resumed, or if this is not sufficient, an aspirating tracheal catheter should be employed. By this procedure, the amniotic fluid and mucus is prevented from being aspirated into the respiratory tract with the first breaths. By attention to these minor details, many cases of asphyxia, atelectasis, as well as new born pneumonia may be prevented. Aspiration pneumonias, while not frequent during early infancy, do occur. When those so affected come to autopsy, lanugo hair, meconium as well as amniotic fluid are found in the bronchi. Immediately after birth the newly born infant should be kept at rest in a warm room and he should be wrapped in a warm blanket. After the cord has ceased to pulsate and has been cut, the infant should be placed in an especially warmed bed with hot blankets and surrounded by hot water bottles which should not be too hot or too close to his body so as to burn him —an accident which unfortunately is not altogether uncommon. While the newly born baby has some difficulty in adapting himself to the external atmosphere, his temperature, if he is not properly protected, is apt to decline; on the other hand, on account of his undeveloped and unstable heat regulating mechanism, an over-heated bed may cause his temperature to rise considerably above normal.

Most authorities agree that the skin should be oiled daily until the cord falls off; after this soap and water baths may be employed. A neutral or superfatted soap is best. Dame Louise McIlroy is of the opinion that a considerable fall of temperature takes place after birth when bathing in water is the method of cleansing. The loss of heat results in greater decrease of weight in the first few days after birth in the bathed babies than in those who are oiled. Newly born babies should be kept quiet; they should not be disturbed by movements or noise.

PHYSIOLOGICAL LOSS OF WEIGHT

Initial loss of weight which amounts, on the average, to about eight ounces, is supposed to be due to insufficient ingestion of food after birth. During the first few days the maternal breasts are secreting slightly if at all, and the infant is not accustomed to taking nourishment by mouth. The loss in weight lasts from four to ten days. The birth weight is regained, on the average, in ten to fourteen days. It was considered that this initial loss in weight was unavoidable and was in exact relation to the secretion of breast milk. Kugelmass, in a recent communication, says that the post natal loss of weight does not obtain in other animals of any size, gestation period or scale in evolution. He thinks that post natal loss of weight is due to dehydration and semi-starvation, conditions unfavorable for nutritional, physical and environmental adjustments in the newly born. It has already been noted that the loss of weight in the newly born is due primarily to a disproportion of intake and output; one-third to one-fourth of this loss is due to the passage of meconium; from one-sixth to one-eighth to the passage of urine, and in addition, there is the loss due to evaporation of fluid from the body surface and the moisture of expired air. The initial loss of weight amounts to eight per cent for the first born baby and 6.4 per cent for the subsequently born babies. The loss of weight in the first few days has come to be looked upon as physiologic, and is called a normal process when decline varies between 150 and 200 grams. This gives a percentage of loss of weight from six to nine per cent of the total body weight. Cases have been reported in which no loss of weight occurred. The factors which influence the loss of weight, in general, are: 1. high birth weight, in which case the loss is not only relatively but absolutely greater than the average; 2. the conduct and progress of labor. In cases of severe birth trauma there is increased loss of weight; many such babies are drowsy and refuse to nurse, and are grouped into the general class termed cerebral concussion or meningeal hemorrhage; 3. the time of tying the cord, which is believed to be a factor; some think that when the cord is tied late, the loss of weight is not so great as in those babies in whom the cord is tied early; 4. the greater loss of weight is sustained by boys because the average birth weight is higher in boys than in girls; 5. icterus becomes a factor when it is persistent and associated with fever; under these circumstances an infection or sepsis may be suspected.

Bonar in a recent review of this subject, quotes authorities who deprecate putting the baby to the breast at too early a period (the first or second 24 hours).

The same applies to cow's milk feeding during these first days because babies do not take food well during this early period. It is also thought that there is an advantage in not giving a complementary feeding at first, especially if the breast milk is adequate, because the baby will be encouraged to empty the breasts when the maternal milk supply is once established. Stimulating the flow of breast milk is the best method of insuring an adequate supply. After all that may be said about the improvement in methods of artificial feeding, it cannot be denied that breast milk feeding is the safest and best calculated to improve the baby's nutrition and diminish infant morbidity

and mortality. It has been maintained by Eder and Bakewell that acidosis, in either a mild or severe form, may occur during the first few days of life, especially in those infants showing inanition fever. These authors think that sodium citrate is of value in the prevention as well as the treatment of this condition. They report a series of cases where newly born babies were given two ounces of 5 per cent lactose solution containing 5 grams of sodium citrate; the loss in weight was reduced and the infants so treated regained their birth weight earlier. There were fewer cases of inanition fever and the general condition of the babies was better.

Kugelmass suggests another formula to prevent the initial loss of weight; it consists of a solution containing 6 per cent gelatin, 3 per cent dextrin and 0.5 per cent sodium chloride administered at two-hour intervals throughout the first few days. He says that the gelatin dehydrates blood and tissues; it raises the body heat by virtue of its specific dynamic action and it reduces the clotting time of the blood. Dextrose brings the hypoglycemia of the newly born to normal; sodium chloride raises the initial low blood chloride and favors hydration.

In summary, it may be said that the baby should be put to the breast at least once in the first 24 hours. Five per cent lactose or dextrose solution may be given during the inanition period. The baby should be encouraged to empty the breasts before resorting to artificial feeding, though complementary feedings should be instituted when the weight loss exceeds eight ounces.

FEVER DURING THE FIRST DAYS OF LIFE

Transitory fever occurs in the newly born usually between the second and sixth days of life. The changes observed in the infant are not only shown by the presence of elevated temperature but also a number of general symptoms are associated which may be of an alarming nature. The symptoms are due to dehydration. The skin becomes dry and may be picked up in folds; it loses its normal coloring and assumes a pale, grey hue. The infant becomes restless, gastrointestinal symptoms develop, and there are marked declines in weight. Convulsions may occur, and one would naturally think of a sepsis or perhaps an alimentary intoxication. The chief cause of the so-called transitory fever is thirst due to insufficient food intake (most of these infants are receiving insufficient milk from the maternal breasts and the fluid intake from other sources is not supplied). In some instances, the infant is slow in taking the breasts and the parents think that by withholding other fluids the baby will be trained to suck the milk from the breasts. Unfortunately the result is that the fluid intake is totally insufficient; consequently, the baby receives neither milk nor other fluid. He may be receiving ¾ to 1 ounce of fluid per pound, whereas he needs 2 to 3 ounces per pound of body weight. A newly born infant bears fluid deprivation badly, more so than if the quantity of food were inadequate.

In all cases where fever associated with symptoms of dehydration occur, one should think of transitory or thirst fever, especially if the fluid intake is less than an infant requires. The treatment follows from what has been said: water should be given freely and in sufficient quantity by mouth, or, if the infant is unable to retain the water given by mouth or if the quantity taken is insufficient, fluid may be administered by hypodermoclysis. Food should be given in the proper quantity and quality to maintain the nutritional needs of the infant.

ASPHYXIA

Asphyxia of the new born is of the greatest interest at the present day. Before proceeding with the various conceptions about treatment, we should make a brief inquiry as to the causes of asphyxia. Prenatal causes depend upon some obstruction to the flow of oxygen from the mother to the fetus. Among fetal causes may be mentioned diaphragmatic hernia, congenital heart disease, malformations or anomalies in the great vessels, or incomplete development of the cerebral cortex or medullary centers, whereas intra-uterine disease of the lungs is a rare cause; nevertheless these organs are subject to defective development or malformations. The pneumonia alba of congenital syphilis is to be considered. In premature infants asphyxia may be due to incomplete development and instability of the respiratory centers, as well as atelectasis. It should also be pointed out, in this connection, that there is a striking predisposition of the premature infant to meningeal and cerebral hemorrhage with its associated asphyxia.

Causes of asphyxia associated with parturition, briefly enumerated, are the following: interference with placental circulation, pressure on the cord or the winding of the cord around the baby's neck, premature detachment of placenta, traction on the cord, prolonged second stage of labor, maternal convulsions due to toxemia of pregnancy, post partum hemorrhage, the use of pituitrin—which prevents relaxation of the uterus in the second stage of labor, aspiration by the infant of blood, mucus, amniotic fluid and meconium are not of infrequent occurrence and may produce asphyxia.

Cerebral hemorrhages resulting from birth injury and causing an increase of intracranial pressure, as well as tentorial tears, hemorrhage into the cortex or medulla, or into the meninges, and injury to the phrenic nerve during delivery may cause asphyxia. Atelectasis is almost a constant accompaniment of every variety of asphyxia.

That a number of babies will die because of the severity of the asphyxia and its serious underlying

causes is obvious. It is also quite apparent that in serious lesions of the central nervous system produced by the trauma of a difficult labor, violent attempts at resuscitation are out of place. Such methods of resuscitation as Schultze's swingings should be looked upon as obsolete in obstetric practice. When the asphyxia is moderate, wiping out the mouth or aspiration of mucus from the trachea and large bronchi with an intra-tracheal catheter is the method of choice. It has been suggested that in introducing the catheter one should proceed as in intubation of the larynx. The base of the tongue should be pulled forward, facilitating the entrance of the catheter into the larynx. It has also been recommended that a catheter should be passed into the stomach to allow gas to escape, and also to close the esophageal opening because many tracheal catheters are passed into the esophagus instead of the trachea. It is a serious complication if the infant is born deeply asphyxiated in a state which is called asphyxia pallida or white asphyxia. The cardiac as well as the respiratory centers may be paralyzed because of prolonged pressure or intracranial injury. It is unwise to try to produce respiratory movements until the cardiac function is established, or restored. It is imperative that the infant should be kept quiet and warm. Baths should not be given at this time because they cause loss of heat; all movements of the baby should be avoided because of the danger of increasing the extravasation of blood in an infant in whom hemorrhage may have already occurred.

Treatment by inhalation of oxygen, or by oxygen combined with carbonic acid is the most recent method employed. Yandell Henderson recommends a mixture of 7 per cent carbon dioxide with oxygen. This may be given with an ordinary anesthesia mask, or by the method of Flogg, who advises the use of intratracheal insufflation. The Drinker respirator may be used as a mechanical method to produce artificial respiration. This latter method has been used in the cyanosis of atelectasis, and also in asphyxia of the newly born, though in the early types of asphyxia, the inhalation method seems less violent. Henderson claims that the carbon dioxide in the mixture stimulates the respiratory centers and would use it in every newly born baby as a prophylactic measure against asphyxia, atelectasis and aspiration pneumonia. Eastman, reviewing the work of Henderson, says that the carbon dioxide is superfluous and possibly harmful, inasmuch as it may tend to intensify an already existing acidosis. "'There seems," says Eastman, "only one urgent indication in the treatment of asphyxia neonatorum, and that is to introduce oxygen into the blood of the infant." This may be introduced by inhalation or by the use of the Drinker respirator. The carbon dioxide oxygen inhalation method of Henderson is quite generally practiced and its use is sanctioned by most authorities. If physical stimulation must be employed, it should not be used when the little patient is livid or pallid, but only when, as a result of oxygenation, the skin color has changed from extreme pallor or blueness to a pink color.

CONVULSIONS

Convulsions in the newly born should be looked upon as an ominous symptom. At this time of life one would suspect some organic lesion of the central nervous system. Not only the difficult labor, but the normal labor as well, may be followed by cerebral hemorrhage. Premature infants, as is well known, are exquisitely predisposed to such hemorrhages, and consequently to convulsions.

As has already been pointed out, many of the newly born and premature infants suffering from intracranial hemorrhage die from asphyxia with or without convulsions. In another group the convulsions cease after several days, or they may disappear after one or two seizures. One hopes in these cases that the attacks were not organic in nature. The infant may remain free from seizures for months and seem to progress normally, but about the end of the first year it becomes apparent that some disorder of motor or psychic function has occurred—an infantile cerebral palsy, or Little's disease, has developed from the cerebral hemorrhage.

Other cerebral defects, such as congenital porencephaly or microcephaly, may cause eclamptic attacks.

Inflammatory disease of meninges and brain are at times difficult to diagnose with certainty during the first weeks or months of life. Purulent meningitis may establish itself upon the site of a previous hemorrhage. One would think that these inflammatory conditions in young infants could be easily recognized, though as a matter of fact, they not infrequently present the greatest difficulty in diagnosis. Such signs and symptoms as disturbed consciousness, high temperature, protrusion of the fontanelle, opisthotonus and changes in reflexes may be difficult to elicit. Strangely enough, these symptoms, so manifest in older children, are only slightly indicated or absent in the young infant. This is particularly true of delicate, underweight or premature infants. Convulsions are frequently the first sign of an intracranial inflammation. If one suspects meningitis, and is led to perform a lumbar puncture, examination of the spinal fluid aids in establishing the diagnosis. Encephalitis occurs rarely during the newly born period, though in a septic infection brain abscess may occur; in a later period encephalitis due to congential syphilis is a possibility, or sporadic or epidemic encephalitis, with the usual train of symptoms, may be

observed. As has already been pointed out, children born of eclamptic mothers may be attacked with convulsions shortly after birth. Tetany is reported to have occurred during early infancy. The condition may be recognized by convulsions, laryngismus stridulus, Chvostek's facial sign, increased electrical excitability, and the so-called Trousseau's sign; also decrease in blood calcium. Tetany is frequently associated with rickets.

Congenital syphilis may be an early cause of cerebral inflammation manifested by convulsions. Convulsions may occur in infancy as well as later, as the result of severe infections, or alimentary disturbances. It has already been noted that convulsions may occur in thirst or transitory fever.

Epilepsy.—The relation of epilepsy to convulsions in the newly born is always to be thought of; while the possibility of a neonatal epilepsy exists, it is difficult to verify at this period. A large proportion of the early convulsions are due to intracranial hemorrhage—these should not be included under the classification of essential epilepsy.

INFANT NUTRITION

The feeding and nutritional factors are probably the most important points in infant management at any period. I realize, however, that the subject continues to be controversial and the recital of details monotonous if not fatiguing. I shall endeavor to state general principles in a summarized form so as not to bore a group of general practitioners to whom this whole subject is an oft-told tale.

MATERNAL NURSING

When the flow of breast milk is established, after the third or fourth day, every baby should be given the advantage of maternal nursing. While nearly every mother can and should nurse her baby, there are certain well defined contra-indications; these may be considered under three heads: (1) A tuberculous mother should not nurse her baby—not because of the danger of the transmission of tubercle bacilli through breast milk, but because of the intimate contact of mother and baby which nursing necessitates. Also, because tuberculous processes in the mother may be increased during lactation. (2) Severe chronic diseases of the mother, such as nephritis, genuine diabetes and other debilitating disorders as well as recurrent epilepsy and organic nervous diseases and psychic disturbances. (3) When a new pregnancy occurs during the lactation period.

There are many who advise continuance of breast feeding during acute infectious diseases, such as scarlet fever, typhoid, diphtheria and acute tonsillitis on the principle that the antitoxic products pass to the infant through the milk. This sounds well theoretically but practically such mothers are so miserable and prostrated that even removing the milk with a breast pump is a cause of annoyance and suffering to the sick mother.

There are also those who advise that mastitis is not always a contra-indication against breast feeding, aside from severe cases of interstitial and parenchymatous mastitis with chills, fever and lymphangitis. In such cases there is the ever-present danger of pus and micro-organisms breaking into the milk supply. In nearly every case of mastitis there is pain during nursing and manipulation of the breasts so as to make nursing, in most cases, intolerable. Fissures and rhagades of the breast are the source of pain and discomfort during nursing. Sometimes too frequent or prolonged nursing makes the nipples tender. The use of strong antiseptics and over-medication should be avoided. Fissures should be treated with an application of silver nitrate; breast shields may relieve pain, or pumping the breasts with the electric breast pump may be borne with less discomfort than the infant's sucking. It has also been recommended that the mother should be in the sitting, or during the first days' post partum, in the half-sitting position during nursing. It is believed that the nipples are less liable to injury in this position.

If rhagades or fissures have occurred, there is always danger of infection; with the production of mastitis it may at times be necessary to bandage the breasts and place them at rest to prevent abscess.

The first appearance of milk in a parturient woman, on the third to fifth day, with the occurrence of pain and slight fever, may stimulate an abscess. The breasts become tense and hard; there may be an elevation of temperature, but the course of the disorder, with the rapid regression of symptoms, clears up any doubt as to the diagnosis.

A syphilitic mother may nurse her baby with impunity, though a syphilitic baby should not be put to the breast of a healthy wet nurse. The converse is also true; a baby should not be placed to the breast of a syphilitic wet nurse.

DIET OF THE NURSING MOTHER

There are so many varying individual opinions as well as fairy tales about the nursing mother's diet that they are hard to combat. The possibility of influencing the quantity or quality of maternal milk by diet exists in the narrowest range. During the Siege of Paris, as well as during the Central European Blockade in the last war, when food was insufficient and lacking in variety, women nursed their babies without experiencing any appreciable change in quantity or quality of milk. The instructions for nursing mothers not to eat salads, cabbage and raw fruit should be disregarded, since experience shows that these foods do

not as a rule affect the milk, though if the mother is allergic to certain foods, they should be omitted from her diet. It is obvious that a woman who is delivering at least 600 calories of food to her baby daily needs a sufficient diet to cover this caloric production. She should take half again as much food as she consumed before lactation began. Do certain foods stimulate the milk flow? While it has been held that cereals, malted drinks, beer and milk in large quantities stimulated the milk production, the whole process is not as simple as this —feeding the raw material does not produce the finished product. If a nursing mother receives a quart of milk daily, in addition to three simple meals, she will obtain all the food necessary for adequate lactation. Some drugs are excreted in the milk, though most of them in minimal quantities. Lactogogues are no longer in vogue. Sucking the breasts is the best stimulant to milk flow. A healthy psychic condition of the mother, with a will and joy to nurse, are not the least important factors. The influence of menstruation is discussed pro and con; ordinarily when menstruation occurs during lactation, the baby does not experience any alimentary disturbance. The milk may, however, be reduced in quantity during this period.

TECHNIQUE OF NURSING

The infant should be fed every four hours, five to six feedings at first; after three to five weeks, five feedings daily. A normal, healthy baby draws all the milk that has been secreted in ten or twelve minutes. No baby should be allowed, under any circumstances, at the breast longer than twenty minutes. As a rule, only one breast should be given at a time, though where the supply is insufficient both may be given. Complementary feeding should not be begun during the first few days of lactation but only after the physician is convinced that the baby is receiving insufficient food from the breast. Underfeeding is recognized by the failure of the baby to gain in weight, crying and restlessness. On the other hand, hungry children are often unnaturally quiet; the stools may be hard and dry, though rarely, diarrhea may occur. Spitting and vomiting are sometimes observed in these undernourished infants. After a time such an infant loses in tonus and turgor; the water content of the skin is diminished; intertrigo and dermatitis may occur; the abdominal parietes sink in. It is well to weigh these infants for a time at least, before and after feeding, in order to determine whether they are receiving sufficient food; furthermore, everyone knows that the infant should receive daily 45 calories per pound of body weight to cover his nutritional needs, though this figure is only approximate, not mathematically accurate, for the infant is not harmed if he receives 60 or even 70 calories of breast milk per pound.

ARTIFICIAL FEEDING

It will be impossible to consider in detail all of the numerous mixtures used in present-day artificial feeding. It should, however, be a principle that all mixtures be simple; the less complex the formulae, the easier it is to determine how they should be changed to comply with the infants' nutritional needs. Also there is less difficulty in preparing them in the home.

The use of undiluted cow's milk in infant feeding has been employed, though not feasibly, the reason being that whole milk feeding fails principally due to the fact that the carbohydrate is insufficient. Cow's milk undiluted contains 4 per cent of sugar, while mother's milk contains 7 per cent. Formerly the feeding formula which was used for new born infants consisted of one-third milk—in the quantities used in each bottle it is apparent that the caloric needs were not supplied. Thus, one quart of one-third milk, two-thirds of water, contains only 200 calories. It is now an almost universal practice to begin in early infancy with one-half milk, one-half water mixtures. For a time the fat was feared as the offending element in the cow's milk; so some infants were fed skim milk or buttermilk with a rich addition of carbohydrate. It is recognized that a low fat diet is of great value in digestive disturbances, but on the other hand, the normal infant requires fat. If it is not present in the infant's diet, the infant's skin loses elasticity, the muscles their tone and the baby does not gain normally in weight. In breast milk the fat is about 3½ per cent and the sugar is about 7 per cent. This proportion, which attains in human milk, should be adhered to in preparing the infant's food, the fat should be to the sugar in the proportion of one to two.

A few general and important hints about artificial baby feeding may be stressed at this point; artificial feeding should not only serve to increase the baby's weight, but also to preserve his immunity against disease. The baby should be periodically examined to observe whether he is developing normally. This is the best test of a correct diet. The stools should be watched, but normal physical development is a more important criterion of the baby's progress. The infant should receive enough food of the proper kind. Fat in the proper quantity and quality increases the immunity of the body. The amount of protein is readily covered by the ordinary milk dilutions containing at least one-half whole milk.

The vitamin content of the milk should receive consideration early in the infant's life. Whole cow's milk contains vitamin A, though it is well to begin as early as the fourth to sixth week by giving five to ten drops of cod liver oil or its equivalent in the form of some similar oil. The content of antineuritic vitamin B in cow's milk may be insufficient, and if not present in adequate quantity, may be augmented by whole wheat, pearled barley, cooked corn meal, oatmeal, unpolished rice, eggs, and vegetables—though most of these articles are not suitable for young infants—same applies to asparagus, beans, beets, cabbage, celery, lettuce and spinach, and especially yeast, which also contain vitamin B. The water soluble vitamin B was formerly thought to be a single factor, though the vitamin is now known to consist of at least two vitamins, and consequently, it may be termed the vitamin B complex. Vitamin C may be given in the form of orange juice in ten drop doses as early as the fourth or fifth week, gradually increasing the dosage. Alfred Hess has reported that a lack of vitamin C induces a hypersusceptibility to infection more than the absence of any other. A part of the carbohydrate required may be supplied in the form of some thoroughly cooked cereal such as barley, oatmeal or rice in addition to sugar in some forms which is added to all milk preparations.

Vitamin D may be administered in the form of direct sunlight—ultra violet irradiation—irradiated ergosterol (Viosterol) or cod liver oil.

Most normal infants will do best on a four hour feeding schedule, though this rule is not inflexible. Some babies will take less food at a time and it may be necessary to resort to the three hour feeding interval. A baby should receive 1½ to 2 ounces of whole cow's milk for every pound of his weight, with sugar and water added. Perhaps the most important single contribution to the whole subject of artificial infant feeding is the boiling of cow's milk. It renders it free from micro-organisms and it increases its digestibility. Acidified milk may increase the digestibility and decrease the high buffer value of cow's milk.

Unsweetened evaporated milk and the dried milks are well tolerated and may be used in place of whole cow's milk. Their use is recommended by many clinicians and babies thrive on these foods, particularly if the proper vitamins are supplied. One ounce of evaporated milk in the day's formula for every pound of the baby's weight makes an approximately correct mixture; water and sugar must be added. Some clinicians recommended boiling the unsweetened evaporated milk with a cereal to increase its digestibility, especially for use in infants with a feeble digestion. Evaporated milk has 60 per cent of its water content removed. It should be remembered that vitamin C is destroyed in evaporated as well as in dry milks by the heating process. Evaporated and dried milks are particularly useful for young infants who are taken on long journeys.

Sweetened condensed milk, when diluted, contains an excess of sugar and a low protein; it is not to be recommended. These babies gain in weight, though often have loose stools. The increase of weight is not normal but consists largely of water that is retained in the tissues by an excessive carbohydrate ingestion. These infants have a low immunity against infection and lose weight easily. The osseous and muscular systems develop poorly under this food.

VACCINATION

Vaccination against smallpox should be performed during early infancy. It has been recommended that infants be vaccinated during the first weeks of life, though in any event, vaccination should not be delayed after the third or fourth month. The infant probably has some immunity against smallpox during this early period derived from the mother. In early vaccination the reaction is less severe and complications are less likely to occur.

DIPHTHERIA IMMUNIZATION

Young infants show an inherited immunity to diphtheria which tends, however, to disappear rapidly. After the sixth month of life, they become susceptible to diphtheria infection. Toxin antitoxin or toxoid are now commonly employed to produce immunization. Toxin antitoxin, which contains horse or sheep serum, causes sensitization and is unsuitable in allergic patients. The toxoid is a serum-free preparation detoxified by the addition of 4 per cent formaldehyde or alum. Three doses of toxin-antitoxin are required. Only one or two doses of toxoid are needed for immunization. The toxoid seems particularly suitable for use in young infants. It has been claimed that in six weeks to two months a lasting immunity may be established in 96 to 100 per cent of the children inoculated with toxoid. The percentage is probably not appreciably less in the use of toxin antitoxin. In view of the favorable reports which have been collected in the campaign of diphtheria prevention, all infants should be immunized.

THE SENILE HEART*

EDGAR F. KISER, M. D.
INDIANAPOLIS

An age-old axiom declares that "A man is as old as his arteries." The cardiologist may well paraphrase that adage and say, "The heart is as old as its coronaries," for, barring the ill effects of acute inflammatory endocardial disease, the statement is literally true. The heart is primarily a power machine, the functional capacity of which is entirely dependent upon its myocardial efficiency, which in turn is dependent upon the patency and elasticity of its nutritional vessels. The determining factor, therefore, in the evaluation of cardiac efficiency, is not the chronological age of the heart but rather its ability to meet the demands made upon it to maintain adequate systemic circulation. Some hearts are old in early childhood; others are young when they have reached or even exceeded the traditional three score years and ten.

Numerous cases have been reported of children of five or six who at autopsy revealed all of the characteristic findings of arteriosclerosis with typical hypertensive heart disease. On the contrary, Benedict[1] and his co-workers report the study of a man of ninety-two in whom all of the organs functioned as in a young adult, and whose cardiac capacity, as evidenced by physical examination, functional tests, electrocardiogram, and teleroentgenogram, was absolutely unimpaired. I have seen complete recovery from severe broncho-pneumonia in a man of ninety-three whose heart remained perfectly compensated throughout his illness.

The pathological changes which characterize the senile heart are most commonly found in persons past middle life, but exceptions are noted to emphasize the fact that years do not constitute the yard stick by which the age of any organ is measured. Hyman and Parsonnet[2] quote David Riesman as follows: "There is no definite agreement as to what should be called the prime of life or middle life—youth sets the date early, age postpones it. Perhaps, instead of taking a particular year, middle life should be dated from a time when a change of function manifests itself from which a beginning wearing down of the machinery can be definitely inferred. Middle life is rather a physiologic than a chronologic period."

Gross[3] has shown conclusively that nature anticipates senile cardiac degeneration by increasing not only the actual number of coronary vessels, but by establishing, with advancing years, an elaborate network of anastomoses.

* Presented before the Section on Medicine of the Indiana State Medical Association at the Gary session, October 9, 1935.

[1] Benedict, F. G., and Root, H. F.: The Physiology of Extreme Old Age. *N. E. J. Med.* 211:12 (September 20), 1934.

[2] Hyman, A.S., and Parsonnet, A. E.: The Failing Heart of Middle Life. F. A. Davis Co., Philadelphia, 1932.

[3] Gross, L.: The Blood Supply of the Heart. Paul B. Hoeber, New York, 1921.

ETIOLOGY

In the etiological panel of senile heart disease, I am impelled to place, first, the constitutional factor. There is inherent in every individual something which establishes his resistance to disease, a gene handed down by some ancestor near or remote, which is the determinant of his longevity. The veriest medical tyro has observed the familial tendency to arteriosclerotic heart disease and allied states. Pende[4] paints a very graphic picture of the status which predisposes to cardiac disease, while Pearl and Ciocoo[5] find only significant variations in the physical proportions of cardiac and non-cardiac groups.

Implanted upon this fertile soil, which has been generations in the making, the most potent seed of cardiac degeneration is unquestionably that of arteriosclerosis; not the sclerosis of Monckeberg with its medial calcification, but rather the process first described by Virchow and later by Aschoff[6], which is dependent upon a disturbance of lipoid and cholesterol metabolism. Jores[7] has defined the process as a degenerative and reparative change in the vessels which produces thickening of the walls, increased tortuosity and narrowing of the lumen with lipoid and hyaline deposits in the intima, increase in elastic and fibrous tissues of the media, and in the later stages a minor degree of calcification. It is granted by almost all investigators that atherosclerosis, the process of development of arteriosclerosis, is dependent upon such deposit of lipoid substances in the intima, but the method of deposit is a debatable question. Timothy Leary[8] describes a method of deposition of lipoids followed by infiltration of a special type of phagocytic cell, after which fibrosis occurs. It is his opinion that the process of lipoidosis begins early in life and that, until middle age, fibrosis keeps step with lipoidosis, but thereafter the connective tissue response is poor and regeneration does not equal fatty degeneration. Aschoff[6] holds the view that fibrous tissue and elastic tissue overgrowth occur in these vessels in an attempt to regenerate and strengthen the weakening arterial wall. The opposing view has been that fibrosis occurs as a result of a chronic infectious process in the wall of the affected vessel. Moschcowitz[9] thinks that hypertension is directly responsible for the lipoid deposit by mechanically

[4] Pende, N.: Constitutional Inadequacies. Lea and Febiger, Philadelphia, 1928.

[5] Pearl, R., and Ciocco, A.: Studies in Constitution. Somatological Differences Associated with Diseases of the Heart in White Males. *Human Biology* 6:50 (December), 1934. Quoted in editorial *J. A. M. A.* 104:221 (January 19), 1935.

[6] Aschoff, L.: Observations Concerning Relationship Between Cholesterol Metabolism and Vascular Disease. *Brit. M. J.* 2:1131 (December), 1932.

[7] Jores, L., quoted by Rosenthal, S. R.: Studies in Atherosclerosis. *Arch. Path.* 18:473, 1934.

[8] Leary, T.: Pathology of Coronary Sclerosis. *Am. Heart J.* 10:328 (February), 1935.

[9] Moschcowitz, Eli: Cause of Arteriosclerosis. *Am. J. Med. Sc.* 178:244, 1929.

breaking down the resistance of the intima. Aschoff and many others believe that the source of the lipoid is the blood plasma, and that the deposition in the intima occurs by absorption. Since Ramsey and Alpert[10] have demonstrated the ability of the intima to absorb dyes, it is not unreasonable to believe that lipoid material might likewise be so absorbed.

The arteriosclerotic process just described frequently remains in the background in senile heart disease until some physical or mental strain, or an intercurrent infection, brings on the first attack of paroxysmal dyspnea or anginal pain. There are many views concerning the mechanics of circulatory failure. Harrison[11] has recently presented very convincing evidence in support of his theory that failure is due to "back pressure." Left ventricular failure manifests itself by dyspnea, cough, and pulmonary congestion. When the right ventricle fails, cyanosis, engorged veins, enlarged liver and edema result. All of these signs are present if both sides of the heart fail. Harrison refutes the theory of "forward failure," that is, diminished output of blood through the tissue.

Levine[12] has called attention to the intimate relation between diabetes and coronary sclerosis. In a group of 145 cases, there were 23.7 per cent in whom glycosuria was found or in whom it was definitely known that diabetes had previously existed. His figures, however, are much higher than those of other investigators, and it seems reasonable to suppose that it is the arteriosclerosis so frequently associated with diabetes, rather than the disease itself, which is productive of senile changes in the myocardium. It has also been shown by Rosenthal[7] and others that patients with diabetes frequently have hypercholesterolemia.

Syphilis plays a larger part in the causation of senile heart disease than is generally recognized; in fact, syphilis, in many of its protean manifestations, is all too frequently overlooked. In a previous communication, Bohner and I[13] reported our experiences in 2,872 routine physical examinations of patients, none of whom had either history or gross stigmata of syphilis. In 2.63 per cent, positive Wassermann, Kahn, and Kline reactions were found, and of the 1,077 men in the group, the percentage having syphilis was six, and this was in a private practice representing the so-called upper strata of society. It is obvious that very often syphilis may be overlooked unless serological tests are a part of every physical examination.

Thyrotoxicosis is not infrequently a potent factor in the production of myocardial failure. It is interesting to note that seventy-five years ago Walshe[14] commented on the relation between the heart and the thyroid gland, saying that he doubted whether sufficient evidence existed to prove that an hypertrophied heart could cause enlargement of the thyroid, as stated by Graves, Stokes, and Parry. Although they had confused cause and effect, these men were sufficiently astute clinicians to recognize the interdependence of these organs.

Clinicians are not agreed as to the influence of coffee, alcohol, and tobacco upon the heart. There is little or no question but that personal idiosyncrasy and perhaps allergic sensitivity determine the effect in individual cases. It is my own belief that any of these substances in moderation are not particularly harmful, but that excessive use may lead to cardiac damage. Of the three, I consider tobacco the worst offender. It has been demonstrated by graphic measurement that smoking definitely reduces surface temperature by reduction of the calibre of blood vessels. It is reasonable to suppose that the coronary vessels would react in the same way as would those of the periphery. Moschcowitz[15] has reported a group of seven men in whom he could precipitate substernal pain at will by having them smoke cigarettes. It is a common observation that most victims of coronary sclerosis are heavy smokers.

Physical and mental strain unquestionably play a part in the production of arteriosclerotic heart disease. I am convinced that the increasing incidence of coronary sclerosis which has been apparent to every physician during the past few years has been due, in part at least, to the strenuous life, both physical and mental, which has characterized the decade from 1925 to the present.

CLINICAL COURSE

While each individual case of arteriosclerotic heart disease presents its own peculiarities, a cross section of a large number reveals a fairly definite clinical picture. The onset is nearly always insidious. In the vast majority, fatigability is the earliest symptom. As a rule this is not associated with defective heart action, by either the patient or the physician, but is alibied in any of a thousand ways. Coupled with this there is apt to be nervousness and irritability with insomnia, and, not infrequently, minor digestive disturbances. These symptoms may persist for weeks or months or even years, until finally there manifests itself the first of the major symptoms, usually dyspnea. This may be mild or severe in degree and is, as a rule, first noted as a sense of distress while performing the accustomed daily tasks. Usually it is on stair climbing that the patient is aware of beginning breathlessness. Not infrequently there is

[10] Ramsey, E. M., and Alpert, L. K.: Absorption Properties of Intima of Carotid Artery. *Pr. Soc. Exp. Biol. and Med.* 30:1432, 1933.

[11] Harrison, T. R.: The Pathogenesis of Congestive Heart Failure. *Medicine* 14:255 (June), 1935.

[12] Levine, S. A.: Angina Pectoris. Some Clinical Considerations. *J. A. M. A.*, 79:928 (September 16), 1922.

[13] Kiser, E. F., and Bohner, C. B.: Incidence of Syphilis in Private Practice. *J. A. M. A.* 98:1631 (May), 1932.

[14] Walshe, W. H.: A Practical Treatise on the Human Heart. Blanchard and Lea, Philadelphia, 1862.

[15] Moschcowitz, Eli: Tobacco Angina Pectoris. *J. A. M. A.* 90:733 (March 10), 1928.

associated with this shortness of breath a sense of constriction in the chest which, if the coronary circulation is seriously impaired, may even precede dyspnea. Either or both of these symptoms may be tolerated by the patient for an incredibly long time, probably because he subconsciously or even consciously appreciates their significance and is afraid to face facts. Eventually, and generally as the result of some unusual physical or mental strain, or as the result of some intercurrent infection, there develops congestive failure or an actual coronary thrombosis.

Smith[16] and his associates record the initial symptom in a series of 420 cases as follows: Shortness of breath in 45 per cent; paroxysmal dyspnea in 8.3 per cent; severe anginal pain indicative of coronary occlusion in 21.7 per cent; angina pectoris in 18.3 per cent; and pain in the chest or epigastrium of an indefinite nature in 6.6 per cent. Pain and dyspnea were frequently encountered concomitantly and the dominant symptom recorded as the initial complaint.

If the coronary circulation is not especially involved, then the case runs the gamut of symptoms of increasing congestive failure—edema of the extremities, engorged liver, hydrothorax, ascites, and finally general anasarca—all the while accompanied by increasing respiratory embarrassment. If, on the other hand, the coronary symptoms predominate, there is the typical picture of angina of effort or of coronary thrombosis.

Varying degrees of heart block may be encountered, and, if of extreme severity, often present the classical picture of the Adams-Stokes syndrome graphically described by Price as "apoplectiform or epileptiform attacks associated with marked infrequency of the pulse."

DIAGNOSIS

The diagnosis of a typical case of arteriosclerotic heart disease presents little or no difficulty. A careful history is of paramount importance and occasionally is the only means of arriving at an intelligent conclusion. The diagnosis of angina pectoris is not always easy. If the case is typical, it presents no great problem, but if the radiation or location of the pain is atypical, it is sometimes a most difficult matter to make a positive diagnosis. A very careful history, noting particularly the circumstances under which the pain develops, the reaction to rest, and the response to nitrites, will often help one to arrive at a definite conclusion.

Coronary occlusion usually runs a perfectly typical course. The pain is substernal and may or may not radiate. It is not the fleeting pain of angina but a deep, severe and boring pain that lasts for minutes or for hours and requires large doses of morphine for relief. The patient generally presents a picture not unlike that of surgical shock, cold, clammy skin and thin, thready pulse, and usually expressing fear of impending dissolution. Nausea and belching frequently are present, as is vomiting if the patient has taken food shortly before the attack. These gastro-intestinal symptoms are responsible for the very frequent mistaken diagnosis of acute indigestion. After a few hours there is a rise in temperature, a sharp drop in blood pressure, and leukocytosis.

Atypical cases of coronary disease may be very confusing in that the pain is aberrant in location, or atypical in character. Levine and Tranter[17], as long ago as 1918, reported infarction of the heart simulating acute surgical abdominal conditions and not infrequently patients have been operated for cholelithiasis or for a ruptured abdominal viscus which at autopsy proved to be cases of coronary thrombosis. Gould[18] points out the diagnostic problem which may arise when a patient with a known heart lesion complains of digestive difficulty associated with upper abdominal pain. It is well to remember that in persons past middle life, any syndrome that stimulates the picture of coronary disease should be so interpreted until it can be excluded by most careful physical examinations and laboratory tests.

The electrocardiograph has eliminated much of the guesswork of the diagnosis of coronary disease. While not every patient with coronary occlusion presents a typical electrocardiogram, if the tracings are taken serially, in the vast majority of instances the diagnostic changes in the graph will establish or rule out the diagnosis. It must be remembered, however, that a negative electrocardiogram does not preclude the existence of coronary disease. It is also to be remembered that the comparatively recent work of Pardee[19] on the interpretation of changes in Q 3 are often the earliest evidences of change in coronary circulation and may precede the familiar changes in T 1 and T 2 by weeks or months.

Congestive failure presents far less diagnostic difficulty than does that of coronary disease, but occasionally paroxysmal dyspnea must be distinguished from bronchial asthma and at times it is difficult to decide whether heart, liver, or kidney is the dominant factor in a patient with extensive edema.

Adams-Stokes attacks may be differentiated from epilepsy by the pulse rate, often as slow as twenty or thirty beats per minute, by the fact that the convulsions are usually confined to the face and upper extremities, that the tongue is not bitten, and there is no loss of sphincter control. There is no aura.

[16] Smith, F. M., Rathe, H. W., and Paul, W. D.: Observations on the Clinical Course of Coronary Artery Disease. *J. A. M. A.* 105:2 (July 6), 1935.

[17] Levine, S. A., and Tranter, C. L.: Infarction of the Heart Simulating Acute Surgical Abdominal Conditions. *Am. J. Med. Sc.* 155:57, 1918.

[18] Gould, L. K.: Gall Bladder Disease Simulating Angina Pectoris. *J. Ind. St. Med. Asso.* 28:5 (May), 1935.

[19] Pardee, H. E. B.: Clinical Aspects of the Electrocardiogram. Paul B. Hoeber Co., New York, 1933.

PROGNOSIS

The prognosis of cardiac failure is laden with many pitfalls. Definite criteria for determining prognosis in a given case are frequently lacking. In coronary disease, Levine[20] reports an immediate mortality of fifty-three per cent in a study of 145 patients, and Willius and Barnes[21] estimate that approximately fifty per cent die in the immediate attack. It is fairly safe to say that if a patient survives three weeks after a coronary thrombus is formed, provided it be his first seizure, he will survive the particular attack. There is no way of determining, however, if or when a subsequent attack may occur. The prognosis in second or subsequent seizures should be most carefully guarded. Smith[22] very wisely reminds us that "The immediate effects and the subsequent course are influenced to a remarkable extent by the treatment during the acute stage and the management thereafter." In other words, the patient's future is largely in the hands of the man who sees him in his first attack.

The outlook in angina pectoris is again most uncertain. Many patients die in the first attack, whereas many survive for a long period of years. Hart[23], in a recent paper entitled "A Plea for Greater Optimism in the Prognosis of Angina Pectoris" cites cases from his own practice and from the case reports published by Sir James Mackenzie, of individuals who had lived from twenty-five to thirty-one years after the first attack. John Hunter was the victim of angina pectoris for more than thirty years. He was wont to say that his life was in the hands of any knave who chose to vex him. He died immediately following a heated argument at a meeting of the College of Surgeons of London. I know of no criterion by which one can judge the outcome in any given case of angina pectoris, and the wise physician will protect himself by a carefully guarded prognosis in every instance.

While there are perhaps fewer dramatic deaths in patients with congestive failure than in those with coronary insufficiency, the prognosis is at best very uncertain. Some patients will show a most remarkable tenacity, whereas others, apparently making satisfactory progress, will die suddenly with no objective sign to warn of impending demise. Sir Thomas Lewis[24] lays great stress on the unfavorable prognostic significance of alternation of the pulse. He says, "Alternation of the pulse belongs to a small group of phenomena witnessed by those who attend the sick, which, treated as isolated signals, are in themselves emphatic and portentous. It ranks with subsultus tendinum, with optic atrophy, with risus sardonicus, and other ill-omened messengers. It is the faint cry of an anguished and fast-failing muscle, which, when it comes, all should strain to hear, for it is not long repeated. A few months, a few years at most, and the end comes."

TREATMENT

It must be emphasized that effective treatment of senile heart disease is dependent upon early diagnosis. If the physician is alert and recognizes in the slight breathlessness, the mild fatigue, the digestive disturbances of his middle-aged patients the potentiality of arteriosclerotic heart disease, then he can render his patients a worthwhile service. It is at this point in the development of the disease, that measures may be instituted which will in some degree improve the circulation and at least postpone the inevitable. The one thing which stands *first* in the armamentarium of the physician in the management of this disorder is *rest*—physical and mental rest. Restriction of physical activities, and, so far as possible, the readjustment of the patient's affairs so as to relieve him of a large measure of responsibility and detail and particularly of worry, are imperative. I deplore the widespread craze, I am tempted to say mania, of the middle-aged American for excessive physical exercise. Tennis, squash, hand ball, and similar sports have their proper places in the program of the young man, but beyond forty the myocardium needs rest. Even golf, if played to excess, is deleterious, and after the first hint of cardiac enlargement—slight dyspnea, precordial distress, or anginal pain—it should be discontinued. I recommend that my patients with beginning failure have ten to fourteen hours of bed rest each day. A couch in the office with a mid-day rest period of thirty minutes is most advantageous, and in many patients whose symptoms have reached a point in which definite breathlessness on exertion or slight edema manifest themselves, I urge a full day's rest in bed, one day of each week.

I heartily favor the early and sustained use of small doses of digitalis. Henry Christian[25] has expressed his views with reference to this drug as follows: "It is generally believed that increased demand on cardiac function serves to increase cardiac enlargement, and so clinicians advise patients with enlarged hearts to decrease their physical exertion. Can anything else be done in the way of treatment? I believe that just here digitalis has a definitely desirable effect, and if given daily in moderate doses it will retard cardiac enlargement and delay the appearance of symptoms and signs of cardiac insufficiency. Consequently, I advise patients in whom I find enlargement of the heart

[20] Levine, S. A.: Coronary Thrombosis—Its Various Clinical Features. *Medicine* 8:245, 1929.

[21] Willius, F. A., and Barnes, A. R.: Recovery After Cardiac Infarction. *Med. Clin. of N. Am.* 15:69, 1931.

[22] Smith, F. M.: Concerning the Clinical Aspects of Arteriosclerotic Heart Disease. *Internatl. Clin.*, Vol. 3, Series 45, 1935.

[23] Hart, T. S.: A Plea for Greater Optimism in the Prognosis of Angina Pectoris. *Am. Heart J.* 8:755, 1932-1933.

[24] Lewis, T.: Clinical Disorders of the Heart Beat. Shaw and Sons, London, 1925.

[25] Christian, H.: The Use of Digitalis Other Than in the Treatment of Cardiac Decompensation. *J. A. M. A.* 100:11 (March), 1933.

to decrease physical exertion and to take continuously from 0.1 to 0.15 grams of digitalis leaves twice daily unless this amount causes toxic symptoms as occasionally it does. If that happens, the dose is reduced to a point at which no toxic symptoms appear. Digitalis for these patients is continued throughout the remainder of life. The optimum dose is that just below the one which eventually produces toxic manifestations, a dose to be determined by the method of trial and error." My own experience with the method outlined by Christian has been exceedingly gratifying.

With added evidence of congestive failure, rest and digitalis become absolutely necessary, but in the majority of cases there comes a time when, in spite of them, decompensation becomes increasingly severe and the patient's discomfort becomes very distressing. Edema increases; engorgement of the liver, hydro-thorax, ascites, and finally anasarca develop, accompanied all the while by insomnia, increasing dyspnea, and nocturnal orthopnea. Digitalis can no longer cope with the failing muscle and other agencies must be introduced. Morphine in liberal doses is the drug of choice to make the patient comfortable; and to combat the engorgement of all of the tissues, one supplements the digitalis with diuretics. Those of the purin group may be effective, but if not, great benefit usually is derived from the use of mercurials, salyrgan, or novasurol, in combination with ammonium chloride. The response to these drugs is often amazing. The intravenous use of concentrated glucose is at times of signal value, and the patient's comfort is frequently enhanced by the use of oxygen.

Patients in whom the coronary picture is dominant present a different therapeutic problem. They may require small doses of digitalis because of associated congestive symptoms, but the drug in these cases is a two-edged sword and must be used with care. If the pain is anginal rather than caused by actual coronary narrowing, small doses of brandy help to maintain mild dilatation of the peripheral vessels and often afford a considerable measure of relief. So, too, the regular administration of small doses of sodium nitrite in combination with theobromine have proved effective; and great relief is obtained in a frank attack of angina pectoris by the cautious use of nitroglycerin. Again, I must emphasize the importance of rest. It is even more important in patients with coronary symptoms than in patients having congestive failure.

An attack of coronary thrombosis demands prompt and energetic treatment. Absolute bed rest, with no liberties whatsoever, is important. Morphine should be given at once in large doses, and repeated often enough to give complete relief from pain. This may require a grain of the drug within the hour. Oxygen is of benefit if the patient is markedly dyspneic or cyanotic, and intravenous concentrated glucose, with or without insulin, is of value. If it is absolutely necessary, digitalis may be given within the first twenty-four hours after the attack, but beyond that time, it should not be given within a period of four to six weeks because of the danger of rupturing the infarcted heart. Its use even within the first twenty-four hours is hazardous because of the possibility of encouraging ventricular fibrillation. Caffeine may be given with safety during this period, as may adrenalin if the development of heart block demands it.

The diet in patients with heart disease should be bland and non-irritating, carefully avoiding foods that might produce abdominal distention. Master[26] advises a very low caloric diet together with absolute bed rest in an effort to lower metabolism and thus relieve part of the load upon the heart.

While the literature of the past few years has been deluged with reports of surgical measures to relieve various forms of heart disease, the idea dates back to a suggestion of Francois-Frank in 1899. It was he who discovered that the cervical sympathetics carried the pain impulses from the heart. Acting on his suggestion, Jannesco,[27] in 1916, first performed widespread excision of the cervical sympathetics and obtained complete relief of pain in a case of angina pectoris. In 1923 Coffey and Brown[28] obtained a similar result by less extensive removal of cervical ganglia on one side only, and in 1925 Mandl[29] in Europe, and in 1926 Swetlow[30] in New York obtained gratifying results by the paravertebral injection of alcohol into the dorsal nerve roots on the left side. This latter procedure has largely replaced the earlier operative measures and carries with it promise of relief in a large percentage of cases.

Within the past two years Blumgart[31] and his associates, and Levine and Cutler[32] have reported very gratifying results from the somewhat spectacular and unquestionably hazardous operation of complete ablation of the thyroid gland. Following in the wake of their reports, numerous surgeons throughout the country have undertaken the operation, but the method is as yet too new to be properly evaluated. Marvin,[33] considering

[26] Master, A. M.: Coronary Artery Thrombosis with Treatment by Prolonged Rest in Bed and Low Calory Diet. *J. A. M. A.* 105:5 (August 3), 1935.

[27] Jonnesco, T.: Operative Cure of Angina Pectoris. *Bull. Acad. de Med.*, Paris, 84:93 (October 5), 1920.

[28] Coffey, W. B., and Brown, P. K.: Surgical Treatment of Angina Pectoris. *Arch. Int. Med.* 31:200 (February), 1923.

[29] Mandl, F.: Paravertebral Injection of an Anesthetic in the Treatment of Angina Pectoris. *Arch. f. Klin. Chir.* 136: 495, 1925.

[30] Swetlow, G.: Paravertebral Alcohol Block in Cardiac Pain. *Amer. Heart J.* 1:353, 1926.

[31] Blumgart, H. L., et al.: Congestive Heart Failure and Angina Pectoris—The Therapeutic Effect of Thyroidectomy on Patients Without Clinical or Pathologic Evidence of Thyroid Toxicity. *Arch. Int. Med.* 51:866 (June), 1933.

[32] Cutler, E. C., and Levine, S. A.: Proc. of Interstate Postgrad. Med. Assembly of N. A. 1933.

[33] Marvin, H. M.: An Evaluation of the Surgical Treatment of Angina Pectoris. *Bull. N. Y. Acad. Med.* 2:7, 1935.

alcohol injection and total thyroidectomy, summarizes his opinion as follows: "Is there a place for either or both of these therapeutic procedures in the treatment of anginal heart failure? In my opinion there is most certainly a place for alcohol injections. I believe the present evidence indicates that thyroidectomy will also find a permanent place in the treatment of angina, although I share the prevailing belief that at present it should be reserved for those patients in whom pain makes life intolerable or prevents the earning of a livelihood. The criteria for the selection of suitable patients are not yet sufficiently known, and it is possible that it will ultimately be reserved for a few severely ill patients who have bilateral radiation of pain, who have hyperthyroidism in addition to angina, or who have failed to respond to alcohol injections."

Dr. Marvin's very sensible conclusions may perhaps be interpreted as a warning against the indiscriminate use of such extreme measures as grave surgery except in the most carefully selected cases. Happily, most patients respond to more orthodox measures.

The keynote of success in the treatment of senile heart disease is:

First, the early recognition of the disease;

Second, a proper appreciation of the value of physical rest together with the intelligent administration of a few well-chosen drugs.

226 Hume Mansur Building.

DISCUSSION

Herman M. Baker, M. D., Evansville: Since everyone in the room is a candidate for thought along this line, I am inclined to say about Dr. Kiser's paper what Dr. Edlavitch in his discussion said about the paper on diabetes—I think we should have a paper on this subject read to the Section nearly every year.

Dr. Kiser has left little to be said in his excellent review of this very important subject. All that remains is perhaps to emphasize some points to you.

I think this has been an extremely important discussion of the effect of arteriosclerosis. My own experience is that a much higher percentage of failing hearts are due to coronary insufficiency than is generally supposed. In addition to the symptoms recounted by Dr. Kiser, I would call your attention to what Riessman calls the "gastric masqueraders" of coronary disease—epigastic pressure, pyosis, gall bladder symptoms, etc., and to Sprague's admonition that coronary sclerosis should be the first diagnosis in any patient past forty who begins to be awakened at night, or has any distress in the chest or upper abdomen. Repeated fainting spells, easy fatigue, sweating on exertion, should all be given consideration as being of coronary origin.

For several months past we have in our office been doing routine electrocardiographic examination of all patients past fifty, and we are astonished at the number of instances in which there is evidence of coronary damage, previous occlusion, etc.

I would like to emphasize what Dr. Kiser says in regard to care in diagnosis. It is not always easy, but it is of extraordinary importance to be correct. This is very true of the early and proper recognition of actual occlusion. We are still seeing all too many of these cases die with a diagnosis of acute indigestion that might have been saved to years of usefulness.

Attention is again called to the fact that one must not place too much reliance on the laboratory or on the electrocardiograph. The clinical picture and history is always the foundation upon which to build a diagnostic structure.

My own experience leads me to believe that we have been a bit too pessimistic in our prognosis of these cases of coronary sclerosis and occlusion, in private practice. Given early recognition, proper management, and a living regime afterwards, many of these patients are restored to years of usefulness.

I agree with Dr. Kiser and wish to emphasize his words when he says: "I deplore the widespread craze, I am tempted to say mania, of the middle-aged American for excessive physical exercise." What people past forty need is *rest*. And again, when he says: "It must be emphasized that the effective treatment of senile heart disease is dependent on early diagnosis." I am in entire agreement, and wish to plead for earlier and more careful recognition of these senile changes.

Bayard G. Keeney, M. D., Shelbyville: The senile heart implies senile changes which are not necessarily pathologic. Life is not a static but a changing process, and just like every other living thing, arteries and capillaries change just as naturally as our hairs grow gray.

Arteriosclerosis is a degenerative process associated with advancing years and is part and parcel of this bioplasm of the individual. Therefore, heredity should play a part. In a series of 300 cases, Mortensen reports a family trait in 67 per cent; O'Hara in 68 per cent.

Atheroma is a mark which years place on the arteries, and as Dr. Kiser states, constitution may defeat age. Timothy Leary of Boston recently made the important observation that atheroma of the arteries is a disturbance of the cholesterol metabolism. Current knowledge of the esterols is limited, but it is rapidly growing under the stimulation of new evidence that cholesterol is one of the most important substances in the body.

Like diabetes, arteriosclerosis is an inherited disease and leads to an early coronary death. The process of atherosis is a deposit of cholesterol ester, which is a fat, deep in the intima, gradually extending to the surface. It may erupt into the

(Continued on page 614)

UNDER-TREATMENT VERSUS OVER-TREATMENT OF SYPHILIS*

ARTHUR FLETCHER HALL, JR., M. D.
FORT WAYNE

We recognize inadequately treated syphilis as the relapsing disease "par excellence"—in fact our conception of what comprises adequate treatment has been largely determined by the type and amount of therapy which has been found necessary to give a reasonable assurance against relapse. The object of treating syphilis is generally conceived to be the cure of the individual and the protection of others, including the unborn, from infection by rendering and keeping the syphilitic patient noninfectious. The necessity of safeguarding the public health by appropriate treatment of infected individuals is obvious and needs no justification here. For the purposes of this study, we shall confine the discussion to the welfare of the infected individual.

Much has been written on the application and interpretation of the word "cure" when applied to syphilis. When the word is spoken in medical circles, it is usually enunciated with a peculiar, characteristic emphasis which seems to be the vocal equivalent of the quotation marks that usually enclose it when it appears in print. This treatment of the word seems to be justified by the variety of interpretations which are placed upon it in its application to syphilis. Some will not admit that anything short of what is variously referred to as biologic, pathologic or radical cure may be so designated, while others maintain that cure in the clinical sense, comprising the serologic and symptomatic, may also be dignified by the term.

The difficulty centers around the lack of a satisfactory test of any kind of cure, except perhaps "serologic cure," which by itself is no cure at all, for it is a common observation to find syphilis progressing in spite of a negative serology, or completely arrested in spite of a fixed positive Wassermann. Quite obviously, extensive microscopic examination of the various tissues post-mortem as a test of biologic cure will serve neither as a consolation to the patient nor as a therapeutic guide to the clinician in his management of the individual case. On the other hand, the only test of clinical cure is time—not just a certain specified length of time, but the rest of the patient's life. The consummation of this test is only slightly less remote than the post-mortem test.

These criteria of cure, although not practical for application to an individual patient, have been applied to great advantage towards giving us an idea of the *chances* of attaining cure of an individual with a given amount of treatment. Following such considerations, Stokes estimates that biologic (pathologic or radical) cure can be attained in 75% of early cases, while clinical cure can be expected in 80 to 85% of all cases.

If biologic cure means destruction of every spirochaete in the body with consequent termination of the disease, and if clinical cure means continuous freedom from all symptoms and signs of the disease, although spirochaetes may still be present, why is not the one as satisfactory as the other? It is conceivable that the presence of the infecting organism, although not giving rise to symptoms or signs recognizable as syphilitic, may nevertheless be responsible for apparently unrelated ills which are no less detrimental to the health of the host—in that case, what is designated as clinical cure would be inferior to biologic cure. But is it not conceivable also that the extra load of antisyphilitic treatment considered necessary to turn clinical cure into biologic cure, may so affect the patient as to render him vulnerable to other threats to longevity? As long as we have no test for either type of cure which is applicable during the life of the affected individual, we have no direct method of arriving at an answer to this problem. We can, however, examine the ultimate outcome of groups of patients who can be classified as untreated, inadequately treated, and adequately treated, according to currently accepted standards.

What is the ultimate outcome of untreated syphilis? The untreated case is usually the unrecognized case; therefore, the cases which come to our attention are only the ones that are discovered by accident or by the infection's manifesting itself in some troublesome form. The great numbers of untreated syphilitics which do not develop trouble are not evaluated, so we are likely to assume an unduly gloomy outlook for the entire group. A unique investigation carried out by Bruusgaard in Oslo, and quoted by J. E. Moore in his "Modern Treatment of Syphilis" gives what is probably a closer approximation to the actual state of affairs. Between the years 1891 and 1910, 2,181 patients with early syphilis were recognized but given no treatment at all or, at most, a little iodide and/or mercury by mouth. Between 1925 and 1927 an attempt was made to check up on these individuals; 309 of the original group were re-examined and the cause of death of 140 more was determined, 40 of these by autopsy. In summarizing the results of this investigation, Moore concludes:

> "When left to evolve spontaneously neurosyphilis occurred in 9.5% of patients, cardiovascular syphilis in 12.8%, and the incidence of each increases with the passage of time. In all, a total of 23.1% of these patients developed a serious, often fatal, late lesion of syphilis. In an additional 12.2%, some late lesion of skin, mucosae or bones developed, disfiguring perhaps but not fatal. However, if one includes the patients who died from some disease not related to syphilis, no less than 64.6% of the total number of patients passed through the whole period of observation without being seriously incon-

* Presented before the Section on Medicine of the Indiana State Medical Association at Gary, October 9, 1935.

venienced by their disease; and in 27.9% spontaneous cure was the apparent result."

Without detailed knowledge of how these former patients were located, it is impossible to say whether the most favorable or least favorable examples preponderated. It may be asked, however, "Did the 64.6% who passed through the period of observation without being seriously inconvenienced by their disease, live out a normal life expectancy?" This is the question that the practical and far-sighted patient with syphilis would be interested in; it makes not so much difference *what* he dies of, syphilis or not, as *when* he dies.

The situation of the inadequately treated group is brought out by Stokes and DesBrisay through a study of about 500 such cases at the Mayo Clinic. Most if not all of these, however, were presumably sick patients reporting to a hospital for aid. Less than 1% of the 208 untreated members of this group had attained spontaneous serologic and symptomatic cure; 6% of those who had received treatment by mouth were totally arrested, while 10% of them had attained serologic negativity. Of the 178 who had had modern but none the less totally inadequate treatment, 18% were Wassermann negative; in this group, considerably less than half as much cardiovascular, visceral, osseous and cutaneous syphilis developed as did in the mouth-treated and untreated groups.

These results indicate that a little treatment, no matter how little, is better than none. The same conclusion is borne out *with respect to infectious relapse* by the data of the Cooperative Clinical Group which recently carried out a joint investigation under the auspices of the United States Public Health Service; their results showed an orderly decrease in percentage of infectious relapse as the amount of treatment increased.

When judged by ultimate outcome, however, the conclusions are noticeably different. For example, Moore's figures show that serious late syphilis (cardiovascular and/or central nervous system) will follow early syphilis in 25% of cases if untreated, *35-40% if inadequately treated*, and 5-10% if thoroughly treated; clinical cure can be expected in 30% of untreated cases, only 15-20% of inadequately treated cases, and 80-85% of thoroughly treated cases. Again it may be asked, "How long did these people live, and how did the groups compare with each other and with 'normal expectancy,' as to length of life?"

This is the question in which the life insurance companies are interested—so the answer is to be sought through a study of their data. Through the courtesy and support of the Lincoln National Life Insurance Company, of Fort Wayne, such a study has been undertaken, and is still in progress. A preliminary report of certain aspects of this investigation should be of interest at this time.

The Medical Impairment Study, carried out by the Actuarial Society of America together with the Association of Life Insurance Medical Directors in 1929, is a formal statistical study of material contributed by individual life insurance companies writing about 80% of the business in the United States and Canada. The data relating to syphilis are drawn from some 99,000 cases with 830 deaths. Of these, 43,756 had thorough treatment (at least 2 years of "modern therapy" with at least 1 year of seronegativity and freedom from symptoms) and 55,217 did not have adequate treatment, although the great majority attained seronegativity. In the first group there were 379 deaths while in the second, somewhat larger group, there were 451 deaths.

Surprisingly enough, the thoroughly treated, "cured" group showed a mortality which was 147% of the expected mortality for a similar but non-syphilitic group, while the mortality of the inadequately treated portion was only 137% of the normal expectancy. As an explanation for this paradox, "selection" has been suggested: i. e., not so much discrimination is exercised in passing upon the applicant whose infection is apparently cured with thorough treatment, as upon him whose infection is suspected of possible further activity. A more obvious explanation, in part, is suggested by the fact that among the thoroughly treated group, 45% reported initial lesion only and 53% reported secondaries, while among the inadequately treated, 69% reported initial lesion only and only 29% reported secondaries. Further analysis of the situation, however, militates against the validity of this explanation and furnishes us with some interesting grounds for speculation.

The thoroughly treated group averaged 2 years older than the other group, yet its extra mortality above the normal expectancy was almost entirely accounted for by deaths due to causes more commonly encountered at the younger ages (excepting cancer):

Pulmonary tuberculosis..2½ times normal incidence
Appendicitis .....2¼ times normal incidence
Suicide .....2¼ times normal incidence
Pneumonia .....2 times normal incidence
Cancer .....1¾ times normal incidence

The causes of death ordinarily associated with syphilis are conspicuous by their absence from this list.

The extra mortality among the inadequately treated syphilitics, although they averaged 2 years younger, was largely accounted for by causes of death ordinarily associated with the older ages, but particularly with syphilis:

Nephritis .....2¼ times normal incidence
Organic heart disease..2 times normal incidence
Apoplexy and central nervous system diseases also slightly increased.

Apoplexy and central nervous system diseases also slightly increased.

These findings would appear to corroborate those of clinical investigators to the extent that thorough

treatment gives protection from the late serious effects of syphilis, while inadequately treated syphilis is prone to manifest itself in cardiovascular and central nervous system pathology. But what have we done to those whom we have protected from death by syphilis, that they should fall a prey to tuberculosis, appendicitis, suicide, pneumonia and cancer at such a rate that as a group they show a higher mortality than those who were not so protected? It is of further interest to note that the highest mortality of all was experienced among the thoroughly treated whose infection occurred less than 10 years prior to their acceptance for insurance; these showed a mortality ratio of 248% of the normal, while those whose infection preceded their acceptance by more than 10 years showed a practically normal mortality. The inadequately treated group showed no such difference when divided in this way, the figures being 155% when the initial lesion appeared less than 10 years before, and 131% when more than 10 years before entry. This observation might be construed as indicating that large amounts of anti-syphilitic treatment tend to leave the recipient in a state of lowered resistance from which he may recover after the lapse of an undetermined number of years.

But how can we explain the markedly increased suicide rate among those who have had thorough treatment? It is improbable that it is due to despondency occasioned by brooding over their "unmentionable disease," because they have been pronounced cured years before the policy was issued. It is probably not due to emotional abnormalities due to central nervous system syphilis in this group, because no increase in mortality from this cause is indicated. We might hazard a guess that the type of individual who will go to the expense of time and money necessary to obtain adequate treatment from a private physician (practically no clinic patients in the group) is often the serious, introspective or hypochondriacal type who would be likely to resort to suicide under any great stress in later life.

Let us now turn to the experience of the Lincoln National Life Insurance Company, whose cases could be studied individually and consequently in more detail. Of the half a million policies written from 1920 to 1933, inclusive, 1,890 were on individuals who were known to have or to have had syphilis when the policy was issued. In this group, there were 54 deaths from all causes during the 14 year period in question. The individual records of those 54 cases were examined for all details bearing on syphilis and cause of death.

A perusal of the details of treatment reported made it possible to assign the 54 cases who died to the following groups:

Adequate treatment (according to modern standards)	5
Inadequate treatment but apparent clinical cure	28
Grossly inadequate treatment (little or no arsenicals)	7
Insufficient details, but probably inadequate treatment	14
Total	54

The numbers here involved are obviously too small to merit serious statistical consideration, but a study of the outcome of these cases may supply us with some interesting points from which we may get suggestive impressions even though definite conclusions may not be warranted.

The findings with regard to infection and death in this series may be tabulated as follows:

	1 Number of Cases.	2 Average Age at Entry.	3 Average Age at Death.	4 Average Duration of Life After Entry.	5 Expected Duration of Life After Entry (American Experience Table).	6 Average Time From Infection to Death.	7 Average Age at Infection.
1. Adequate treatment, modern standards	5	42.4	47.2	5	26.3	18	29.2
2. Inadequate treatment, with apparent clinical cure	28	41.5	46.2	4.7	27	21	25.2
3. Grossly inadequate treatment	7	37	40.9	3.9	30.3	12.5	28.4
4. Insufficient details as to treatment	14	43	46.3	3.3	26	*	*
5. Entire group studied	54	41.4	45.8	4.4	27	19.1	28.8

*Date of infection unknown.

The small number of cases in the first group makes a tabulation and comparison of actual causes of individual deaths misleading: for example, one of the five in the thoroughly treated group died of general paresis although his blood and spinal fluid were recorded as negative between the cessation of treatment and his acceptance for insurance; this is possibly true, but it is more probably a falsification—to classify this case, would indicate that 20% of this group died of paresis. Furthermore, there was one death from cerebral hemorrhage in the same group, which would leave only 60% of the deaths as from causes apparently unrelated to syphilis—this is probably not a true picture of the situation.

In the second group of 28 deaths among the inadequately treated, but apparently clinically cured, it is noteworthy that one death (3.6%) was surely syphilitic (tabo-paresis) and 10 deaths (36%) were due to cardiovascular diseases, leaving 60% as due to causes unrelated to syphilis. This figure, because of the size of the group (28) carries some significance, and incidentally, closely approaches the 64% of Bruusgaard's series which went through life apparently unharmed by syphilis. The high percentage of cardiovascular deaths runs parallel to the findings of the Medical Impairment Study of 1929, previously referred to, as regards the inadequately treated group; it is also compatible with Moore's findings, quoted above, that serious late syphilis follows inadequately treated early syphilis in 35-40% of cases.

In the grossly undertreated group, the number again is small, but the distribution of deaths is significant. Out of seven cases, 3 (43%) died of surely syphilitic causes, 1 (14%) of possibly syphilitic cause and only 3 (43%) of causes apparently unrelated to syphilis.

Referring to the table, column 3, the strikingly young average age of death, 45.8 yrs., is remarkable; especially so, in view of the fact that at the average age of 41.4 (column 2) all of these individuals were still living and apparently well, except for their history of syphilitic infection. Valid laws of the statistical science make it impossible to compare mathematically the experience found in this series, column 4, with the normal life expectancy (from the American Experience Table) column 5; the two columns are roughly comparable, however, and show such a constant, wide discrepancy with respect to each other that it is safe to conclude that the normal life expectancy is materially cut down by syphilis, be it adequately, inadequately or untreated. Column 6 shows the average length of time which elapsed between infection and death: 19.1 years for the whole series, regardless of how treated, very closely approximates the estimates of Cabot and others (18 to 22 years) for the average length of time thus elapsing in cases which develop syphilitic heart disease. The average age at the time of infection, column 7, is higher for this series than for most, which would seem to make the early average death age even more significant.

In comparing the results in the different groups we see that the thoroughly treated and moderately well treated groups (lines 1 and 2) are quite similar, while the grossly undertreated group (line 3) shows a definitely less favorable outlook. The group of insufficiently detailed cases (line 4) will not be discussed here because of its heterogeneity. It happens in this series that the most thoroughly treated group averages the oldest (42.4 years), moderately well treated, slightly younger (41.5 years), and the poorly treated group the youngest by a good margin (37 years); from this age data alone we would expect that the older group could not look forward to as many *more* years of life as the younger ones (see column 5). As a matter of fact, however, we find the reverse to be the case, indicating that increasing amounts of treatment improved the outlook even more than is indicated by a comparison of the three groups (lines 1, 2 and 3) as to average age at death (column 3), average duration of life after entry (column 4) or average length of time from infection to death (column 6).

SUMMARY AND COMMENT

Clinical studies by other investigators clearly demonstrate that adequate treatment of early syphilis judged by modern standards, brings about at least *clinical* cure, as predicated by the absence of serologic and symptomatic relapse, in the great majority of cases; furthermore, such treatment protects against death from causes directly associated with syphilis. The results of the examination of life insurance mortality data seem to confirm these clinical findings. The life insurance studies, however, rather clearly indicate that the life expectancy of the syphilitic, untreated or treated, adequately or inadequately is materially shortened. Without adequate treatment his chances of a long life are seriously threatened by late fatal manifestations of syphilis—with adequate modern treatment he is protected from this threat, but apparently left abnormally vulnerable to death from certain conditions apparently unrelated to syphilis —namely, pulmonary tuberculosis, appendicitis, pneumonia, suicide and cancer. The tendency of the cured syphilitic to succumb is so marked during the first 10 to 15 years after his initial lesion, that the ultimate mortality experience with the cured group is *at best* very little better than with the inadequately treated group.

If this situation actually exists, one may well ask whether it be worthwhile, or even justifiable, to prolong treatment beyond the point of protecting the public health, to save a patient from death due to syphilis, only to let him die of one of those other conditions at about the same age. To take such an attitude would be to foreswear one of the most deeply rooted ideals of the medical profession: to do everything that can be done for the patient. Comparatively little can be done for him if treatment is curtailed and he is abandoned to the chances of death due to syphilitic cardiovascular or central nervous system disease; but forewarned is forearmed, and once the patient is protected from these threats, much can be done to protect him from the others.

If further investigation and experience should prove the validity of the impressions and suppositions engendered by such a study as the present one, our forewarning will arm us with at least one potent weapon: the recognition of the cured syphilitic's diminished resistance to certain diseases in particular. If, by virtue of his past or present but latent disease, or by virtue of the extra load of antisyphilitic treatment he has borne, or both, he is recognized as probably being particularly susceptible to pulmonary tuberculosis, appendicitis, pneumonia and/or cancer, he can be given the advantage of all the appropriate knowledge which we have toward preventing and treating these conditions, when such susceptibilities are intelligently anticipated.

Wayne Pharmacal Bldg.

DISCUSSION

F. W. CREGOR, M. D., Indianapolis: I do not think anyone can challenge the statement that syphilis seriously compromises the longevity of the individual. A number of years ago, a British commission, appointed for the purpose of studying cancer and tuberculosis, reported that the infection of syphilis apparently had the effect of favoring the development of these two diseases in patients so infected.

I have not compiled the records of my clinic for a long period, but sixteen years ago I compiled a record of 1,000 cases of syphilis, and found that

after all the cards had been placed on the table, by advising of the diagnosis in every instance, every effort made to hold out to the patient the importance of adequate treatment, and he urged to continue this treatment, only six per cent of the patients had received what we regarded as sufficient treatment for syphilis. Ten years ago, Knowles of Philadelphia made a similar report of 1,000 cases of syphilis in his clinic, and reported that only six per cent had received what was regarded as sufficient treatment. This report possibly is not germane to the subject, but it shows a comparable social status in Philadelphia and in Indianapolis, which certainly gives the health authorities and social service workers something to think about.

Probably there is no disease that requires a greater professional perspective for its proper treatment than does syphilis. The physician must be one who visualizes the invasion through the port of entry into the skin, finding its way through least resisting tissues, namely, lymph vessels, then through the lymph stream into the circulation, to be pumped by the heart to all the tissues of the body, so that every tissue that is supplied by blood is infected by the organism that produces syphilis, after which syphilis becomes a tissue disease.

I believe the individual who is infected with syphilis may live his complete life expectancy without ever suffering any ill effects from his infection.

I would prefer to divide the treatment of syphilis into three stages: prophylactic, which we recognize is 98 per cent successful; abortive, which is 98 per cent or more effective, if properly carried out; and curative. I like to use the word "cure" in the German sense, meaning a course of treatment, and do so use it for the psychological effect on the patient, to encourage him to come on and take what we regard as adequate treatment for syphilis. The abortive treatment, instituted after diagnosis by the microscope and before the serology is positive, will be successful in almost 100% of cases. Early syphilis treated as intensely as tolerance of the patient allows, will be successful in 75 to 85 per cent of cases. Latent syphilis offers a different problem; here we encounter the pathologies resulting from the disease and often, pathologies resulting from other diseases. We should ever be watchful for the potential pathologies in patients who are in the decline of life. I do not believe that any syphilologist with our present means of attack believes that we ever completely cure the patient whose syphilis is recognized only after it has become latent. However, syphilologists are agreed that all patients, regardless of the stage in which the disease is recognized, should have a thorough background of treatment. The same rule applies in congenital syphilis, which may be recognized as early or latent.

The child infected by a mother in latency and receiving its intra-uterine nourishment from a mother who enjoys a biological immunity may escape many of the ravages of the disease, but, too, should receive a thorough background of treatment.

Lastly, as Osler said, know syphilis and all things pathological will be plain.

F. M. GASTINEAU, M. D., Indianapolis: I think we have just heard a very important paper on the subject of syphilis. I confess this paper leaves me with a feeling of pessimism and futility in handling the syphilitic. The modern injection treatment of arsenicals and heavy metals has been in vogue for about twenty years, a period long enough to give us some idea of its worth, but I really think we have paid more attention to the killing of the spirochete than to the curing of the infected patient. The trend now is towards continuous and heavy treatment of the early cases, with a minimum of rest period. This method gives us a higher percentage of clinical and serologic cures, but causes the patient to carry a heavy load in excreting the drugs. We are all familiar with the accidents of early treatments with involvement of liver, kidney, and skin; but I believe the conclusions reached in this paper are quite startling and should cause us to question the whole modern concept of the treatment of lues.

A patient after two years of heavy bombardment exchanges his chances for socially inacceptable tabes for respectable appendicitis, cancer, or pneumonia. At the time of the infection the cure is the thing, and most private patients would much prefer the hazards of treatment to the hazards of lues; while most of the clinic patients, in spite of all our promptings, accept the hazard of lues.

I hope Dr. Hall will continue his study of a larger series of cases, because his conclusions should cause us to question the advisability of our present public health and clinic methods. Perhaps it is our duty to protect society only and not force our charity cases to exchange methods of exit. Syphilis surely leaves its impression, psychologically and physically, on every patient who is infected.

TRAUMATIC RUPTURE OF THE GALL BLADDER

REPORT OF A CASE

A. V. COLE, M. D.
EAST CHICAGO

Traumatic rupture of the biliary tract is of rather rare occurrence, as evidenced by the fact that in a recent review of the literature, Rudberg found only forty-one cases in which the ducts were involved and Linormat noted only twenty-four cases of traumatic rupture of the gall bladder itself. In all of the latter cases, there had either been previous surgical treatment which resulted in

the accident or some penetrating wound from the outside such as a stab or gun shot injury. Rupture of the gall bladder as a result of a direct insult to the abdominal wall without perforation of it was found in only one case out of 1,066 reported cases of gall bladder pathology, reported in 1926 by Fifield at the London hospital. Anglesio and Overholt also report one case each. We wish to add the fourth.

The direct cause of the condition as has been noted is an injury to the right hypochondrium over a gall bladder which is more or less diseased. This may be the result of being run over by a cart, as in Fifield's case, or of a direct blow to the part as in Overholt's and in our case. The injury seems trivial at the time, but when it is considered that a diseased, distended gall bladder extends beyond the protecting edge of the liver and lies just below the abdominal wall, the result is not so surprising.

In all of these cases, one notices the striking lack of symptoms and the good condition of the patient, both of which tend to obscure the diagnosis. Shock, which is not very profound, is the outstanding finding; coupled with the pain over the gall bladder region and a history of injury together with rigidity high over the right rectus muscle, the condition is suggested. In one case (Overholt's), when the injury had occurred three days previously, a mass was present. A history of previous gall bladder trouble would complete the picture.

As has been noted, shock is the predominating complication. Since free bile in the abdominal cavity will set up a chemical peritonitis, this complication must also be expected. In our case, a marked liver insufficiency accompanied by glycosuria also complicated the convalescence. This was controlled by the intravenous administration of glucose which was covered by insulin. In other cases, a subdiaphragmatic abscess was found. Overholt treated this with Dakin's solution irrigation. In this case, however, the abscess was established before the ruptured gall bladder was found. If the gall bladder is infected prior to rupture, an infective peritonitis will develop and all of its complications (ileus, secondary abscesses, etc.) may follow. Post-operative fistulae may occur here as well as in any other gall bladder surgery.

CASE REPORT

Mr. N., a well developed, well nourished white male, 50 years old, was admitted to the hospital, complaining of pain in his right hypochondrium, resulting from a blow in this region from an iron bar. The injury was sustained about one-half hour prior to admission.

Physical examination revealed a middle-aged man, in a condition of semi-shock, complaining of some pain over his gall bladder region. No previous history of gall bladder pathology was obtainable. There were no evidences of injury to his body in any place, and except for considerable tenderness just below the lower margin of the right ribs and some rigidity of the upper portion of the right rectus muscle, his physical findings were negative.

Blood count revealed 8,440 white cells with 80% polys, 4,000,000 red cells and 90% hemoglobin. Urine was negative.

The patient was treated expectantly for about one and a half hours until his shock subsided. This was hastened by the external application of heat and the intravenous injection of 1,000 c.c. of five per cent glucose in normal saline. As the shock lessened, the pain began to increase, and two hours after admission laparotomy was performed under ether anesthesia.

On opening the peritoneal cavity, a large amount of free bile was found. The gall bladder was collapsed and had a hole about 3 centimeters long in the fundus. The gall bladder was packed off with sponges and removed. Two drains were inserted into the abdominal cavity and the incision closed. During the course of the operation, the patient again went into shock and the second intravenous injection of five per cent glucose in normal saline was started into the vein with relief of the shock.

The following day the patient developed a glycosuria which lasted until the fourth post-operative day and which was controlled by insulin.

Except for the complicating liver insufficiency and a rather poor pulse for a few days, the patient made an uneventful recovery and was dismissed from the hospital on the twenty-ninth day after admittance.

PATHOLOGICAL REPORT

The gall bladder was opened before submission. Edges were ragged; the organ itself appears congested but otherwise practically normal. Pathological diagnosis: congested gall bladder; ruptured.

All reporters are agreed that treatment, following recovery from shock, is purely surgical and that the earlier the interference, the better. As extensive surgery as the patient's condition will permit should be carried out. Complete removal, if rapid, is obviously the procedure of choice as the organ is to some extent diseased anyway. If this is impracticable, closure of the rent and drainage should be carried out.

CONCLUSIONS

From a review of the literature and from our case, the following conclusions are drawn:

1. That traumatic rupture of the gall bladder is a rare condition especially in the absence of penetrating wounds.
2. That the treatment is purely surgical.
3. That a chemical peritonitis is inevitable.
4. That a liver insufficiency must be anticipated.
5. That some pathology of the gall bladder was present prior to rupture.

3401 Michigan Ave., East Chicago.

ROENTGENOKYMOGRAPHIC STUDY OF AORTIC HEART DISEASE*

E. M. VAN BUSKIRK, M. D.
FORT WAYNE

The roentgenokymograph, an instrument (Fig. 1) designed to record the motion or movement of the borders of the heart, is not manufactured commercially at the present time.

This procedure consists of roentgenography through a slit diaphragm placed close to the object in motion, with the recording film moving at a constant rate of speed, at right angles to the direction of the slit. The motion of the object in front of the slit is recorded in the form of a wave or a curve.

By the multiple slit method, the motion of the heart and its vessels is delineated. The pulsatory motion of the pulmonic structures, direct or transmitted, is recorded.

In view of the fact that equipment for this work is not commercially available, it is necessary for the roentgenologist to construct his own. The one used in making photographs for this article was reconstructed from an old Bucky diaphragm; not considering personal labor, the cost was about five dollars.

The grid is removed, permitting its carrier to be used as a cassette carrier. The front panel of the Bucky diaphragm is replaced with a grid which consists of about thirty-six strips of lead, one-sixth inch thick and one-half inch in width; the strips are glued one sixty-fourth of an inch apart, on a panel of veneer. This, then, supplies small slits for the transmission of the roentgen beam. An electric timing device is arranged to make and break just short of an excursion of the lead bar. The apex of the heart may be vizualized by giving the patient a half teaspoonful of Seidlitz powder, thus forming gas in the stomach, and outlining the apex very clearly.

The patient and the grid remain in a fixed position while the film in the cassette, when released, proceeds downward by gravity. The timing of the exposure is determined by the operator; for example, one second for a seventy-two pulse rate, a little greater time for a slow heart, and a time rating more rapid for a fast heart. This exposure produces a kymographic image on the film. Such an image must not be considered as the entire lateral border of the heart; it is only the extended outward and inward motion of that particular point of the heart, which is only one sixty-fourth of an inch in length.

Objects having no lateral motion during exposure are recorded as straight lines. Fixed tumors (Figure 2), bones, and the diaphragm, show a stair-step arrangement, due to the fact that only one point is stretched out or carried along the width of the grid by the slit-like brush of the Roentgen rays, while in the moving object only the



Fig. 1. Roentgenokymograph hooked to a vertical plate changer, permitting adjustment for height of patient.

* Presented as a part of the Scientific Exhibit of the Indiana State Medical Association at the Gary Session, October 8, 9, and 10, 1935. Published in this issue at the request of several members.

lateral motion of an opaque object is recorded before the one-sixty-fourth inch slit in the grid.

A normal heart (Figure 3) shows very even waves along the entire border. They represent movement records of the particular portions of the heart, and are close enough together to give an accurate representation of the general contour. Over different portions of the heart the waves vary in shape and size, because of a difference in time and amplitude of the movement of the various chambers. Maximum diastole is recorded as the peak of the waves, and the maximum systole as the deepest point of the valleys. Since the kymographic film moves downward, the record is read from below upward: the proximal side of a wave is diastolic, and the distal side is systolic in origin. It is noted that at the junction of two chambers or cardiac structures, the characteristic waves of both may be observed.

With this explanation, I have selected cases showing the aortic auricular and ventricular motion of the cardiovascular shadow in aortic disease to illustrate the possibility of studying other cardiac conditions, including aneurysm which can be differentiated as a pulsating tumor on the grid.

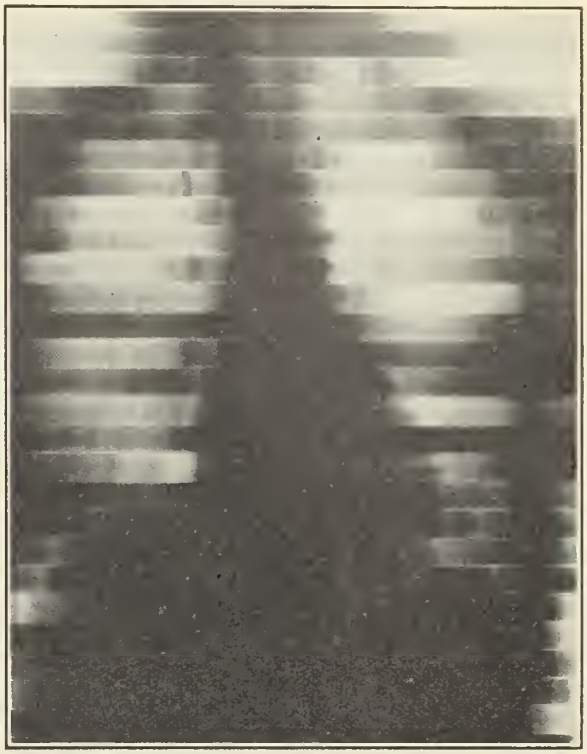


Fig. 3. Normal heart.



Fig. 2. Illustrating vertically straight borders of stationary objects such as tumors and diaphragm.

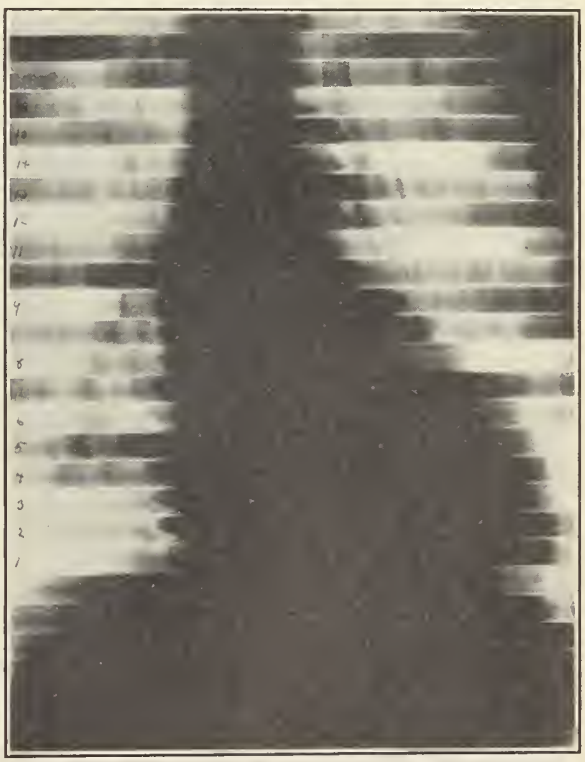


Fig. 4. Case 1. Aortic waves showing almost one inch excursion due to the Corrigan or water hammer pulse. Note the deviation of the ventricular waves from the normal.

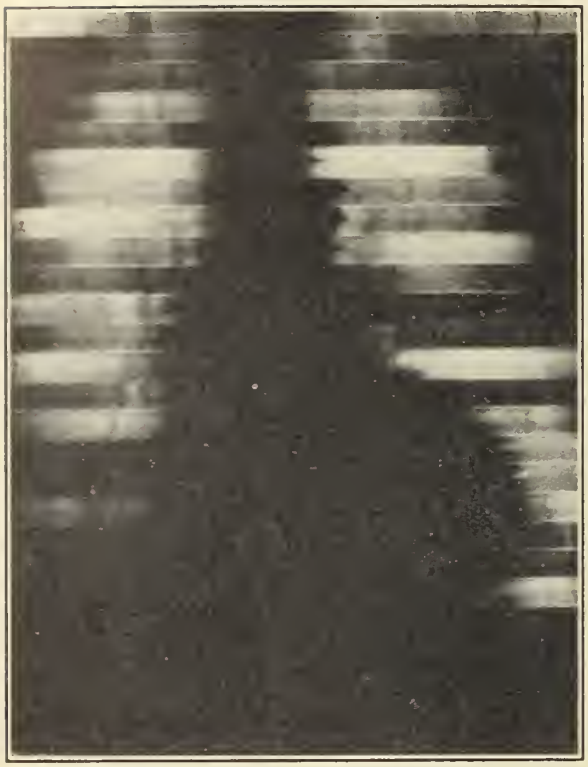


Fig. 5. Case 2. Similar to Case 1, having a diastolic and faint systolic aortic murmur.



Fig. 6. Case 3. Aortic stenosis showing a dilated left ventricle with waves of low amplitude, while the right auricular waves are full and even.

CASE REPORTS

CASE 1. (Figure 4): Male, age twenty-three years. This patient gave a history of having had repeated attacks of tonsillitis during childhood. Physical examination reveals a marked diastolic murmur over the aortic area, Corrigan pulse; systolic blood pressure is 169, and diastolic is 0. The most outstanding features of the kymogram are the markedly increased amplitude of the aortic waves in bars twelve to fifteen, and the qualitative changes in the ventricular waves as noted in bars one to four, with a steep high first portion of the diastolic limb, and a sharp peak at the end of the diastolic period. The systolic movement is also increased in amplitude with deep clear valleys.

CASE 2. (Figure 5): Male, age fifty-eight years. This patient has had a valvular lesion for the past thirty years. He had a chancre at the age of nineteen, with various forms of anti-luetic treatment at intervals during this period. His systolic blood pressure is 180, diastolic 0. Physical examination reveals an aortic diastolic murmur with a very weak systolic murmur, and evidence of Corrigan's pulse. The kymographic record shows aortic waves in bars eleven to fourteen markedly increased in amplitude, while bars two to six on the right border are of smaller amplitude than on the left, which is possibly due to back pressure.

CASE 3. (Figure 6): Male, age 54 years. This patient gives a history of having had arthritis for the past fifteen years. Physical examination discloses a systolic murmur transmitting to the shoulder. This case was diagnosed as aortic stenosis. The kymogram shows that the left ventricle is greatly dilated, and the left auricular waves are small and shallow. Bars eight to twelve indicate auricular fibrillation with the regular sequence of distinct and definite waves replaced by irregular, ill-defined serrations, and peaks of unequal amplitude. On the right border of the heart, in bars one to seven, the waves are full and regular. The right ventricle does not seem to be affected.

CONCLUSION

The idea of this method of studying the heart is not very new. A. W. Crane[1] described a somewhat similar method in 1916, and I. Seth Hirsch[2] recently wrote an outstanding article with a complete bibliography on the subject. These instruments are easily constructed. The fact that the machines and tubes carry a higher milliamperage is responsible for the present development of the process, thus supplying a means for studying the heart in another way.

347 West Berry Street.

[1] Crane, A. W.: Roentgenology of the Heart. *Am. Jrnl. Roent.* Vol. 3, p. 513, 1916.

[2] Hirsch, I. Seth: The Application of Kymoroentgenography to the Diagnosis of Cardiac Disease. *Radiology.* Vol. 12, p. 720. 1934.

THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION
DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

Office of Publication: 1021 Hume Mansur Bldg., Indianapolis.
Editor: E. M. Shanklin, M. D., 5141 Hohman Avenue, Hammond, Ind.
Managing Editor: Thomas A. Hendricks, 1021 Hume Mansur Building, Indianapolis
Editorial Board:
T. B. Rice, M. D., Indianapolis.
Pierce MacKenzie, M. D., Evansville.
L. P. Harshman, M. D., Fort Wayne.
Ernest Rupel, M. D., Indianapolis.
F. T. Romberger, M. D., Lafayette.

NOVEMBER, 1935

EDITORIALS

THE GARY SESSION

Hundreds of clippings from newspapers all over Indiana testify to the interest that the public has in the activities of physicians, and to the success of the eighty-sixth annual session of the Indiana State Medical Association, held in Gary, October 8, 9, and 10. This convention received more space in the public press than has been accorded any previous session; perhaps this may be accounted for by the many matters of vital interest to the public, as well as to the physicians, that were discussed in Gary.

Gary entertained the Indiana State Medical Association in 1928 when the total registration was 892; this year Gary attracted a peak registration for annual sessions held outside of Indianapolis, with a total of 1,011 registrations, comprising 730 members, 183 women guests, 63 men guests, most of whom were physicians, and 35 exhibitors.

A functioning reception committee was conspicuous by its absence, and disappointment at cancellation of the steel mill trip was so great that several doctors turned homeward immediately upon learning that the trip was not available. However, enthusiasm and general interest in the proceedings were at high pitch throughout the three day session, and minor disappointments were quickly forgotten.

The Indiana health officers held their forty-first annual conference at the Hotel Gary on Monday, October 7, just preceding the convention of the Indiana State Medical Association. Principal speaker for the conference was Dr. Wilson G. Smillie of the Harvard School of Public Health.

Golf and the trap shoot were the features of the first day, October eighth, in keeping with the custom of the annual sessions. Fine weather favored the entrants. Dr. Robert E. Acre of Evansville posted a 75 for the eighteen-hole Gary Country Club course, and became the Indiana State Medical Association golf champion, succeeding Dr. Boyd A. Burkhart of Tipton and Dr. Cleon Nafe of Indianapolis who tied for the first place in 1934 at Indianapolis. Dr. Burkhart and Dr. Nafe finished second and third, respectively.

Dr. Claude M. Donahue of Carmel won the trap shoot, breaking 48 out of a possible 50 clay pigeons at the Gary municipal trap shoot range in Marquette park. The high team prize went to Dr. C. M. Harless of Gary and Dr. George E. Clements of Crawfordsville.

At the annual smoker in the Hotel Gary Tuesday evening, Dr. H. G. Cole of Hammond awarded the trap shoot prizes, and Dr. C. C. Brink of Gary awarded the golf prizes to the winners mentioned, and to Dr. K. T. Knode of South Bend and Dr. E. W. Dyar of Indianapolis who had fourth and fifth places. Prize for the low net score was awarded to Dr. W. A. Thompson of Indianapolis, and Dr. A. E. Mozingo of Indianapolis had the second low net score. For high net score, Dr. G. G. Eckhart of Marion was first, and Dr. Raymond W. Spenner of South Bend was runner-up. In the long driving contest, Dr. P. L. Nelson of Anderson drove a ball 226 yards, winning over Dr. E. Blackburn of South Bend by only one yard. Blind bogey prizes were awarded by Dr. Brink to Dr. C. P. Clark, Dr. R. F. Bannister, Dr. A. M. Hetherington, and Dr. C. W. Day, all of Indianapolis, and to Dr. D. F. Cameron and Dr. E. D. Jones, of Fort Wayne.

The annual smoker proved to be so popular that late comers found the Crystal Ball Room crowded, and the food had vanished!

The formal scientific programs opened Wednesday morning, October ninth, with the meeting rooms filled to capacity. The address of our recently deceased president, Dr. Walter J. Leach, was read by Dr. E. M. Shanklin, and was received with reverential acclaim. Memorial tributes were offered at this time by Dr. William N. Wishard of Indianapolis, Dr. E. E. Padgett of Indianapolis, Dr. William L. Starr of New Albany, and Dr. R .L. Sensenich of South Bend.

Drs. Isaac Abt, Ralph Waters, Norman F. Miller, and Louis J. Karnosh held the interest of the attendants at the general session throughout the morning. In the afternoon, the members separated into the various sections where programs of unusual excellence were presented. All section meeting rooms were filled to overflowing. The new Section on Anesthesia, holding its first meeting this year, drew a goodly number of interested visitors, and the enthusiasm displayed testified to the wisdom of establishing that new section.

The Crystal Ball Room of the Hotel Gary was crowded for the annual banquet Wednesday evening; every available seat was sold. Dr. Sensenich paid tribute to Dr. Walter Leach, and the assembled guests stood in a moment of silent tribute. Following a many-coursed dinner (Emily Post would have been anguished to see the way that dry-ice-packed ice cream was skidded over, around, and under the tables!), the audience was splendidly entertained by Dr. James Tate Mason of Seattle, Washington, president-elect of the American Medical Association, who told of the activities of that body, and by Dr. Louis J. Karnosh of Cleveland, who told of the eccentricities of Schopenhauer, Voltaire, Liszt, Beethoven, Michelangelo, Rembrandt, Lord Byron, and Edgar Allan Poe.

Guest speakers on Thursday morning were Drs. Virgil S. Counseller, Sanford R. Gifford, Elexious T. Bell, William F. Braasch, Louis G. Herrmann, and Emmet F. Horine, and again the meeting room was filled with interested physicians who appreciated the excellence of the program.

Meetings of the House of Delegates included two regular sessions, and a tremendous amount of business was transacted. Dr. R. L. Sensenich, president-elect, addressed the House of Delegates and outlined his program for 1936 (published in this issue in page 605).

The House of Delegates endorsed the resolution of the American Medical Association to make further investigation of the study of birth control. A resolution on expert medical testimony in criminal court cases authorized a year's extension of study by a special committee headed by Dr. Max A. Bahr of Indianapolis with a view to preventing the embarrassment of the medical profession as a result of conflicting medical opinion voiced in court by experts of equal eminence. Another resolution approved a proposal to hold the postgraduate seminar at Indiana University next spring, probably in May. A fourth resolution launched a counter-offensive against the campaign of many welfare organizations for the socialization of medicine. The complete reports of the two meetings of the House of Delegates are published in this issue of THE JOURNAL under the department of "Societies and Institutions."

Dr. Edmund D. Clark of Indianapolis was elected president for 1937, defeating a single rival, Dr. Walter MacFadden of Shelbyville, and Dr. A. F. Weyerbacher of Indianapolis was re-elected treasurer. Delegates and alternates to represent the Indiana State Medical Association at Kansas City in 1936 were elected as follows: Don F. Cameron, Fort Wayne, and Dr. Franklin S. Crockett, Lafayette; alternates, Dr. George R. Daniels of Marion, and Dr. A. M. Mitchell, Terre Haute.

Elections of councilors were acknowledged and elections are yet to be held for councilors for the first, fourth, seventh, eleventh, and thirteenth districts, where present terms expire December 31, 1935. For the fourth district, Dr. M. C. McKain of Columbus has been elected to succeed Dr. H. P. Graessle of Seymour; for the tenth district, Dr. N. K. Forster of Hammond has been elected to succeed himself.

Dr. E. M. Shanklin of Hammond was re-elected editor of THE JOURNAL for 1936, and Dr. F. T. Romberger of Lafayette was re-elected to serve on the Editorial Board, these elections being made by the Council. At the Council meeting, Mr. Charles B. Marshall, director of finance of the Governor's Commission on Unemployment Relief, discussed the status of indigent medical relief work. The date of the mid-winter meeting of the Council will be decided later.

The following officers of sections were elected for 1936:

Section on Surgery: Chairman, W. C. Moore, M. D., Muncie; vice-chairman, George Green, M. D., South Bend; secretary, Paul Beard, M. D., Indianapolis.

Section on Medicine: Chairman, A. S. Giordano, South Bend; vice-chairman, E. M. Van Buskirk, M. D., Fort Wayne; secretary, Leon G. Zerfas, M. D., Indianapolis.

Section on Ophthalmology and Otolaryngology: Chairman, E. E. Holland, Richmond; vice-chairman, Howard E. Hill, Muncie; secretary, Raymond Calvert, Lafayette.

Section on Anesthesia: Chairman, Charles N. Combs, Terre Haute; vice-chairman, George Rosenheimer, South Bend; secretary, Lillian Mueller, Indianapolis.

Officers for the Woman's Auxiliary were elected as follows: President, Mrs. R. L. Compton, Osgood; president-elect, Mrs. Marcus Ravdin, Evansville; first vice-president, Mrs. F. B. Wishard, Anderson; second vice-president, Mrs. M. B. Van Cleave, Terre Haute; recording secretary, Mrs. William E. Tinney, Indianapolis; corresponding secretary, Mrs. James C. Carter, Indianapolis; treasurer, Mrs. Clarence L. Bock, Muncie.

South Bend was selected as the meeting place for 1936, winning the convention from French Lick by a vote of 43 to 42, and upsetting a custom of many years which has sent the convention consecutively to north, south, and central Indiana.

Comment about the Gary session would be incomplete without some mention of the scientific and commercial exhibits, both of which were unusually worthwhile and well attended. The displays in the scientific exhibit room received favorable comment from all who visited it, and the aisles between the exhibits scarcely would accommodate all who wanted to inspect them.

In many ways, the Gary convention was the best ever held by the Indiana State Medical Association outside of Indianapolis. The Indiana medical profession is "on its toes" and well it may be, for the public is exhibiting an avid interest in affairs medical.

The Indiana State Medical Association is appreciative of the efforts of Dr. James M. White of

Gary, president of the Lake County Medical Society, and Dr. E. M. Shanklin of Hammond, chairman of the General Arrangements Committee, and all other Lake County physicians and their wives and families who contributed to the success of the Gary session.

AN OPPORTUNITY

A librarian in a neighboring city has asked for literature on the subject of the socialization of medicine. He stated that he had had several inquiries for such data from high school students in his city. A bit later another such request was received, then another. The climax was reached when we were asked to take part in coaching a team which had the negative side (that of the medical profession) in a debate that was soon to be held in one of our high schools. In each of these instances the information sought was supplied, and we trust the negatives may win in each instance.

We do not know where this subject originated as a proper one for high school debating teams, but it is here and it becomes our duty to see to it that the proper sort of information is available for these debaters. We should not wait until we are asked to supply such information; this thing is "going the rounds" and sooner or later your high school will be getting into it. It would not be amiss for you to make inquiries as to whether the subject is being considered in your schools, and if it is, offer to supply intelligent information on the subject. If you do not have this at hand (if you have been reading THE JOURNAL at all carefully you do have it at hand), authoritative information may be secured immediately from the Bureau of Medical Economics of the American Medical Association, 535 North Dearborn Street, Chicago.

Herein lies an opportunity that should not be idly passed. These youngsters are going to talk about us and about our business affairs. We may just as well have them get the proper information as to depend on a hit or miss selection of propaganda, the origin of most of which is a mystery.

GRATUITOUS MEDICAL SERVICE

We have commented on the action of the Colorado State Medical Society in the matter of free medical services, our opinion being that this society had enacted a very much worthwhile ruling in regard to this rapidly increasing evil. We opined that if this society held fast to its interpretation of "who is who" in this regard, it would take a step far in advance of the procession. The report of the committee handling this grave problem appears in the October number of the official organ of that wide awake Colorado group. It leaves no doubt in our mind as to the ultimate success of the venture.

First setting forth a declaration of principles, then defining just what should be construed as proper free medical services, not overlooking the definition of what constitutes an emergency, the committee at once launches into the subject, calling things by their proper appellations and leaving no doubt as to their intent. For example, in the city of Denver and in Colorado cities of 25,000 or more population, the committee recommends that free medical service should be rendered to families with an income of fifty dollars per month or less; a couple with one child and with an income of less than sixty dollars per month would qualify. Each additional child raises the limit to the extent of five dollars per month. Single individuals are rated at forty dollars per month, though each case is placed on an individualistic basis. In cities of less than 25,000 population, the basic rate drops to forty dollars per month income.

There are, of course, provisions made for exceptionally complicated cases, those in which surgery is deemed a necessary factor and those in which it is apparent that the patient is in for a prolonged illness. Family relationships are carefully considered in the scheme, the "in-laws" coming in for the short end of the bargain. Insurance policies, especially those with a cash surrender value and with loan clauses, are carefully considered. Pensioners and beneficiaries of various governmental, civic and fraternal organizations are carefully rated. Property, whether real, physical, or personal, comes in for its proper consideration and analysis. However, it is quaintly provided that property that is a liability—and there are legions of such properties!—shall not deter eligibility.

Regarding automobiles, it is agreed that there is no moral or civic responsibility of the medical profession to supply free treatment to those operating cars which were not contributing to the major earnings of the applicants. (This reminds us of a chap who had made an appointment with us for the treatment of his daughter; he was a day or so late in keeping the appointment and naively explained that the delay was due to the fact that he was breaking in a new car. No, he did not get free medical services from us; he went to another doctor!) Other repossessables, such as radios and the like, are subject to the same conditions as automobiles.

The matter of debts is carefully looked into and if these be for food and shelter, they are regarded as not affecting eligibility to free medical services.

Thriftlessness (we term it shiftlessness in Indiana) comes in for its proper classification.

The whole forms a most complete resume of the entire problem of free medical service and contains a vast fund of information that might well be pondered by most welfare workers. That providers of free this, that, and the other thing are imposed upon goes without saying; any man in active practice knows of a dozen or more such cases; no other class of people, professional or otherwise, is

so imposed upon as the medical profession in times such as these, and it is quite refreshing to note the activities of a medical society in thus planning to circumvent the maneuverings of those who take advantage of every opportunity to get something for nothing.

SOME HOSPITAL PROBLEMS

Physicians usually are busy folks and too often do not take the time intelligently to read some of the more important things appearing in their medical publications; we wonder if this is not often true in regard to the annual reports of our standing committees, as printed in THE JOURNAL for October. True it is that these reports cover many pages but, constituting the rather detailed doings of a truly great medical organization for the year, they should receive a most careful scrutiny. Most of these reports are very well done, and some of them are exceptional. We have long since become accustomed to expecting great things from our Publicity Committee's report; that is one committee which can always be depended upon to make a worth while showing.

The report which especially interests us at this moment is one that we fear has not had the consideration it merits, and that is the report of the Committee on Hospitals and Medical Education. Here is an exhaustive discussion of one of the greatest and gravest problems, the problem of the hospital and what we may and must expect of it.

The opening paragraphs ascribe the development of the modern hospital to its proper source, the medical profession, and that development is traced from the small beginnings as private surgical institutions to the present estate of hospitals. The report speaks of hospital organization, the very backbone of these institutions; it speaks of the financial phases, telling just why hospitals are always confronted with the problem of keeping out of the red.

The minimal size of an efficient hospital is well discussed, at least 100 beds being necessary for a well organized unit, not overlooking the necessity in a state such as ours for a few well placed smaller hospitals. An exception is made of Catholic hospitals, due to the fact that nursing orders "seem to make even small hospitals more successful than their neighbors of equal size." Obviously, the overhead in these hospitals is infinitely less than in others; members of the Orders receive no compensation for their labors.

Comment is made on the fact that America, and Indiana, "has far overbuilt any reasonable hospital program, except for mental cases. The problem for the future is about half as many beds in better hospitals." Indiana hospital occupancy runs about sixty-two per cent to seventy-six per cent of full capacity, in the better equipped hospitals; the others range from forty-three per cent to as low as twenty-five per cent. The report does not dilate upon it to any great extent, but does make some comment on the dangers of such a situation. Among these is the likelihood that the less successful hospitals will sooner or later jump at most any form of socialized medicine which promises to fill their beds. (And there is a lot of red meat in that suggestion!)

We are pleased to note the comment of the committee relative to hospital staffs. They recommend that all local physicians in good and regular standing be permitted the use of hospitals, yet they oppose the allowing of untrained men to carry out any and all sorts of procedures, both medical and surgical, in our hospitals.

The writers of this report know somewhat of this hospital business, it seems; when they begin the discussion of the financial phases of hospital management they make no detours, but get to the point at once. "It is estimated that even the full pay patient pays for his hospital care alone only about sixty-five per cent of what it costs the hospital to furnish it." Now, it stands to reason that unless the hospital is greatly endowed, other means of income must be available. Thus they resort to various extras, such as laboratory fees, x-ray fees and what-not. So, the committee avers, the doctor is put on the spot; it is his patient who must pay for these extras, and the patient, not being in an analytical mood, charges the whole thing to the *cost of medical care.* (This very thing was the most unfair part of the now famed majority report of the Committee on the Costs of Medical Care.)

The committee compares a modern hospital to a hotel and makes the flat, bald statement that "any hotel would go bankrupt were its business management as amateurish as that of the average hospital of the same size."

Then comes the problem of nursing. As is stated in the report, the hospitalized patient expects nursing care; he does not know that other than routine care is available only at a price, oftentimes a price that is prohibitive to many.

Lest it be inferred that the report in any manner condemns our hospitals, we state that this report is purely constructive criticism; it sets forth things for what they really are, and points the way to better understanding of the problems and to better and more efficient hospitals.

We commend the report; we hope that it was or will be read by every physician in Indiana.

DEBATE ON SOCIALIZED MEDICINE

The National Broadcasting Company is providing the facilities of its red network for a chain broadcast on the question of socialized medicine on Tuesday afternoon, November 12. The negative side will be discussed by Dr. Morris Fishbein, editor of THE JOURNAL of the American Medical Association, and Dr. R. G. Leland, director of the Bureau of Medical Economics of the American

Medical Association. Affirmative speakers will be William Trufont Foster, director of the Pollak Foundation, and Professor Bower Aly, University of Missouri, and editor of the debate handbook.

The last name on this debate program throws a strong ray of light upon several points regarding this debate handbook, a text which will be used by the many thousands of high school youngsters throughout the country who are to take part in debates on this subject this winter. Naturally we supposed that the handbook would be supervised by neutral interests and that the editor of it would maintain a neutral viewpoint on the question. Undoubtedly his affirmative leanings have had something to do with the copious amount of material in the handbook having to do with the affirmative side, and the dearth of material concerning the negative side. We cannot deny that Mr. Aly solicited material from probably all available sources on both sides, but how could he be fair in his analysis of material when he was preparing to uphold the socialization of medicine? Mr. Aly, we thought, was supervising the collection of material for a handbook that would give unbiased points for discussion for both sides. Could he be impersonal in his selection and editing of material when his personal feelings are definitely in favor of the affirmative side? We believe not, and we are distinctly disappointed to find this situation and wonder that the sponsors of the debates will permit such an occurrence. It smacks of an unfairness which we had hoped would be avoided in these debates, which will be participated in by youths all over our nation.

EDITORIAL NOTES

THE JOURNAL staff is quite in accord with the resolution adopted by the House of Delegates regarding scientific papers published in THE JOURNAL. On several occasions the Editorial Board members have deemed it wise to reject papers submitted, and this resolution bolsters the authority of the Board.

THE December JOURNAL will carry a complete roster of the members of the Indiana State Medical Association, as it did last year. This issue will serve a number of valuable purposes, for it also will contain the index for the year's volume. File it for reference purposes.

A BULLETIN from the secretary of the Madison County Medical Society calls attention to the fact that fifty years ago (on October 7, 1885) the Madison County Medical Society was addressed by Dr. Ward Cook, who reported a case of placenta previa delivered by podalic version, saving both mother and child; he also reported having had five cases prior to that one without any mortality.

AN UNUSUAL title and a most interesting paper is that by Oliver Gilliland of Kansas City, in the October number of *The Journal of the Missouri Medical Association*—"Differential Diagnosis of Imaginary Diseases of the Ear, Nose and Throat." Of course the writer deals mostly with the hysterias, but he marshals his material in a masterly style. We believe the article might well be read by all engaged in these specialties.

WE ARE pleased to know that the resolution was adopted endorsing the action of the American Medical Association House of Delegates at the Atlantic City session, regarding birth control. This action of our House of Delegates should not be misconstrued, however, for we merely endorsed an exhaustive study of the subject by the A. M. A. special committee, which group is to report its findings at the Kansas City session in 1936.

IT IS not too early to begin planning to attend the Kansas City session of the American Medical Association, opening on May 16, 1936. Plans are already well laid by the medics of that city for an elaborate meeting. The average doctor is a bit slow about making hotel reservations. For many years we have been accustomed to attend to this duty some six months in advance of a large meeting and find it well repays the foresightedness in having comfortable quarters ready for us on arrival.

A STORY runs that Dr. William Tecumseh Lusk, erstwhile famous New York obstetrician and teacher, once said to his class: "Gentlemen, of course you will marry soon after you have located. Let me advise you that when you are going out for an evening with your wife, do not stand at the staircase and say, 'My dear, are you ready, are you ready?' But just pick up a book and read. You will be astounded at the amount of information you will accrue in a lifetime.—*Nebraska State Medical Journal*, October, 1935.

A WRITER in one of the current medical journals takes the olive wreath for descriptive technique. Entitling this contribution, "Calcified Pus in Peritonsillar Abscess," he describes his experience in handling the case, and states that after a stormy course his patient had a choking spell and the doctor was sent for, with the admonition that the

patient was choking to death. He found that the peritonsillar abscess had ruptured and that a large calcified object had been emitted with the resultant pus discharge. He closes the report with the statement, *"Tonsil Reduced. Hole in tonsil feeling better!"*

SOMETHING must be radically wrong in the preachment of vaccination against smallpox in the State of Washington. According to a late report of the Washington State Director of Health for the current year, only three-fourths gone, 1,014 cases of this disease have been reported in that state. *Northwestern Medicine* calls that "a disgraceful record," in a leading editorial in the October number. Contrasted with this is the record of an eastern city of more than eight hundred thousand population in which there has not been a reported case of smallpox during the past six years!

THE Nebraska State Medical Association has recently employed a full time executive secretary, in the person of Mr. William C. Smith. Judging from the manner in which Mr. Smith greets his new employers in the October JOURNAL of that Association, we are of the opinion that the Nebraska State Medical Association is to be congratulated on acquiring a go-getter for this new office. This Association, by the way, has a paid-up membership of even eleven hundred; thus it is evident that even the numerically smaller societies see the advantage of a full time executive secretary.

THE general public is considerably aroused over the great number of needless injuries and deaths resulting from traffic accidents, and as a result of the report of the Committee on the Prevention of Traffic Accidents, considerable newspaper space was devoted to the subject during and following the Gary session of the Indiana State Medical Association. Comments were to the effect that the profession deserved praise for its efforts to investigate, analyze, and prevent the causes of traffic accidents. This is just one more instance of physicians working hard to reduce misery, even though the success of their efforts must mean a marked lessening in their personal incomes. Is there any other profession more altruistic?

AGAIN does Dr. George G. Richardson, for so many years the sole member of the committee on necrology, add to the debt owed him by our Association for the beautiful manner in which he makes his annual report in THE JOURNAL for October. Long since having departed from making a purely formal report of the passing of Indiana physicians, Dr. Richardson comments in his inimitable style, giving a resumé that is of more than passing interest to most of us. We are prone to look over the death notices from month to month and comment on the number of physicians who have "gone West," yet the report shows that the average age of deceased doctors in the present report was 81 plus; a year ago it was 71 plus. As usual, diseases of the heart led in the causes of death, 32 Hoosier physicians having succumbed to these maladies.

TIME was when we were more or less active in what has come to be known as the gentle art of Indiana State Medical Association politics, hence we may be permitted to make some observations anent the subject. We have no objection to politics of a sort being mixed up in Association affairs, but we do believe that it is poor policy to permit personal quarrels to become mixed up in matters pertaining to House actions. If our deductions are correctly made, we believe we may say that on at least two occasions during the election program, such personalities had much to do with the vote. It is one thing to have an opinion, based on the belief as to what is best for the Association; it is another thing when such opinions are based upon matter of a purely personal nature.

"THE shoemaker should stick to his last," is an adage that we have employed frequently. This suggests that the special committees appointed by the chair as a result of a vote of the House should confine their activities to the business at hand. This often will save much time during House sessions. Much time was wasted during the first session of the House, in the discussion of the question of the adoption of a codified Constitution and By-Laws. It seems that the committee somewhat exceeded the orders of the House and in addition to codifying the present Constitution and By-Laws, proceeded to make certain changes therein. This led to what amounted to a contest on the part of a large group of delegates. In this connection we would suggest that steps be taken to eliminate many unnecessary delays in the transaction of the business before the House.

SOME time ago a magazine with a more or less national circulation published a special number on "Buying Health." That this issue had a large circulation is attested by the fact that the editor, who was overlooked in the distribution of free copies to many physicians, experienced no little trouble in securing a copy at the news stands. Somehow or other, we failed to get excited about that particular issue, and subsequently we received

several inquiries as to why we said nothing about it in THE JOURNAL. Now, according to the *New York State Journal of Medicine*, it appears that this issue was largely financed by some of our "foundations." The Twentieth Century Fund is credited with having supplied the sum of $3,500 to this magazine for this purpose. It seems that our "hunch" was very good on this occasion.

WE CONFESS to no little disappointment over the action of the House of Delegates in the matter of the resolution providing for the payment of some of the expenses of our A. M. A. delegates. The report of the reference committee was flatly against such a thing, and the report was adopted as read, and since the House has negated the idea, that of course ends the argument. However, we cannot refrain from commenting on one observation of the reference committee, to the effect that election to the A. M. A. House of Delegates is a signal honor, and one that should be welcomed by any member of our Association, without regard to the expense involved; that payment of the actual expenses might lower the "class" of our delegates! Were the latter true, then the A. M. A. House must be in a "low" state, since we are advised that a majority of the states do pay the expenses of their delegates. The House has spoken and we shall have to retire as gracefully as we may.

THE lay press seems to get a real kick out of the efforts of certain of our larger cities to curtail various unnecessary noise-producing agencies. In a recent number of the *New Yorker* there appears a cartoon on the subject, a cartoon that is really laughable. It depicts the carrying of various articles from an apartment by a group of moving van men, with a police officer snooping about the corner, the better to detect a violation of the anti-noise law. As a matter of fact there is entirely too much unnecessary noise in our cities, much of which is of the nerve-wracking sort. Among the many that especially disturb us in our daily toil are those motorists who are chronic users of their horns. Every day we have occasion inwardly to pronounce a varied assortment of curses upon those motorists who, finding themselves delayed by a train at a crossing, begin a concerted tooting; the din at times becomes unbearable. While on the subject, we opine that the average motorist makes of himself a public nuisance by the unnecessary use of his automobile horn.

ALL county society secretaries have ere this received from headquarters a copy of the recommendation of Dr. Sensenich, in connection with a proposed postgraduate study. The recommendations are published in this issue of THE JOURNAL. We would recommend a careful study of this little document by all county medical societies, since it offers a way to more interesting and profitable meetings during the coming year. Further, we would suggest that the programs be arranged in what might be termed a chronological order; if heart affections are to be considered, let the program be such as to include all the more common affections of those organs. As we recently remarked to the incoming president of our local society, too often our programs are in no wise correlated. Postgraduate study is possible and available in the smallest of our societies and all should take advantage of the present opportunity. If you need outside speakers they will be gladly supplied on application to the Bureau of Publicity of the Indiana State Medical Association.

THE Council on Medical Education and Hospitals of the American Medical Association held a meeting in Denver, September fifteenth, and adopted a new policy, as follows:

(a) Resolved, That in each medical school the number of students should not exceed the number that can be adequately taught with the laboratory, library and clinical facilities available and for whom a sufficiently large and competent teaching staff is provided.

(b) Resolved, That after July 1, 1938, the Council on Medical Education and Hospitals will no longer publish a list of approved two-year medical schools.

(c) Resolved, That after July 1, 1938, the Council on Medical Education and Hospitals will no longer carry on its approved list schools of sectarian medicine.

These resolutions were adopted because the survey of American medical schools so far completed has revealed significant weaknesses; namely, a tendency for medical schools to enlarge their enrollment without a corresponding increase in personnel or instructional facilities, and the evidence that the necessary intimate correlation between clinical and laboratory knowledge can be obtained only by increasingly close contact between preclinical and clinical departments continuously maintained from the time the student first enters the medical school until he graduates; and that the advances of the medical sciences have been and should be independent of any sectarian point of view, and medical education should not be handicapped or directed by a dogmatic attitude toward disease. We believe that members of the medical profession will applaud these actions.

CONVENTION NOTES

SOUTH BEND—OCTOBER, 1936

Registration at the Gary session was 1,011. Each year the convention has a larger attendance. This is approximately 100 more than registered at the Gary session during the "boom" year of 1928.

The headquarters staff is to be commended for the manner in which they managed details. Convention plans have become so well organized with the staff that there is little or no delay during the three-day period of the annual session.

"Cap" Norton deserves our thanks for the many courtesies extended through the Gary Commercial Club. Use of the club rooms in the Hotel Gary added much to the pleasure and comfort of convention guests.

Lanterns for the scientific sessions were supplied through the courtesy of Dr. Verne K. Harvey, director of the Indiana Division of Public Health, and were installed by Mr. Bynum Legg and Mr. Noble Smallwood, of the Indiana Division of Public Health, who aided Dr. O. B. Nesbit of Gary. Dr. Nesbit was chairman of the Lantern Committee.

It has been estimated that approximately seventy-five interested physicians visited the first meeting of the new Section on Anesthesia. Much enthusiasm was displayed and the genuine interest exhibited was proof of the fact that the Association was wise in creating the section last year.

The American Medical Association's president-elect, Dr. J. Tate Mason of Seattle, Washington, qualifies for the title of "ambassador of good will" for the A. M. A. His banquet address on work of the A. M. A. was exceedingly well adapted to lay audiences, for it most convincingly refuted many of the claims of advocates of socialized medicine.

Reference committee reports were exceptionally well prepared, presenting well studied analyses, and this applies to standing committee reports as well as rather numerous resolutions prepared at the first meeting of the House. All committee reports were adopted as read.

"Sweet Adeline" held but one brief session during the convention. On Wednesday night, the hotel lobby resounded to the familiar refrain, the sick tenors seeming to have the "call."

We would suggest a little more promptness in starting meetings on schedule, and a marked degree of speeding up the business before the meetings. The first session of the House wasted much valuable time in inconsequential matters.

The Ladies Entertainment Committee, Allegra Nesbit and Kae Oberlin, daughters of members of the Lake County Medical Society, proved to be most capable in the planning of the luncheon and bridge on Wednesday. These two young women overlooked nothing in planning for the entertainment of the ladies present.

The annual banquet was a complete sell-out. Every chair was occupied. President Sensenich was at his best, and the events of the evening were run off in a most admirable manner. Jimmy White, rotund president of the Lake County Medical Society, sang in his usual happy vein, this being the only entertainment of the annual banquet.

Precedents were upset in the selection of a meeting place for 1936. For years it has been customary to select the northern end of the state, then the south part, and the central part in rotation. Some objection already has been registered because we will have two consecutive sessions in the northern part of the state.

Olin West, busy and efficient secretary of the American Medical Association, made two short visits to the convention. Dr. R. G. Leland of the Bureau of Medical Economics of the American Medical Association, also attended.

Among the scientific exhibits were those of the Indiana Pharmaceutical Association, the American Medical Association Council on Physical Therapy, The American Society for the Control of Cancer, and the Indiana Roentgenological Society. In connection with the last exhibit, Dr. E. M. Van Buskirk of Fort Wayne showed a series of "kymograms"—timing the exposure of the film to synchronize with the pulse rate. This particular exhibit aroused an unusual interest among internists in attendance at the convention.

The selection of Dr. E. D. Clark of Indianapolis as president-elect for 1937 is a reward justly his due, for his many activities, both in the local society and in the Indiana State Medical Association, over a long period of years.

Attendance at the first session of the Council was unusual, considering the fact that the meeting was held at an extreme end of the state. All districts save the eleventh were represented. The late Dr. George D. Miller was councilor of this district for the past ten years.

The posthumous address of our late president, Dr. Walter J. Leach, was read at the opening of the first general session. It was regarded by all as a masterpiece and should be read and preserved by every member. Particularly should it appeal to our younger members. It is printed in this issue of THE JOURNAL.

One of the most colorful figures of the conventions of the past was that of the late Dr. George D. Miller of Logansport. His famous "long meter" roll call in the House of Delegates had long since become an institution and was sadly missed at this convention.

Dr. Carl McCaskey, sharpshooting Capital City golfer, plays a system all his own. Most entrants in the annual golf derby betake themselves to the course immediately after breakfast, hoping to get the jump on the gang. Not so, Carl; he enters the fray later on in the morning. Reason: the early dew is off the grass, the ball rolls farther!

Charles Marshall of the State Division of Finance explained to the Council the set-up adopted for PWA relief work, as of October first. Mr. Marshall made it very clear that federal monies would not be used for defraying expenses incident to illness in families on the PWA rolls. In other words, a physician called in such cases would be expected to render services under the same conditions as would apply in a family with a minimum monthly income of $44.

President Sensenich found his time fully occupied during the convention. In addition to the duties falling to the lot of present-elect, he was compelled to perform the rather onerous tasks of president.

Continuing his custom of more than sixty years, Dr. William N. Wishard traveled from Indianapolis for the convention. The Grand Old Man of Indiana Medicine commands a large and highly interested audience whenever he speaks.

There was an unusual number of "races" during the election, at the second meeting of the House of Delegates. In the matter of selecting the place of the meeting, on the first ballot, Bloomington received 21 votes, French Lick 34, South Bend 29; on the second ballot, French Lick had 42 and South Bend 43.

On three occasions during the balloting in the House of Delegates it appeared for a time that Dr. Sensenich would have to cast the deciding vote, so close was the balloting.

Bob Bills, in his first essay at "putting on the show" made a huge success of the entertainment features of the annual smoker. The presentation was of a very artistic order, and was clean. Members present expressed themselves as having been well entertained.

One of the scientific exhibits that attracted more than usual attention at the Gary convention was from the surgical department of the Indiana University School of Medicine, demonstrating the various types of plastic work done under the direction of Dr. H. M. Trusler. Numerous photographs of the "before and after" variety were shown, together with movies of the surgical procedures in several cases. Dr. Trusler exhibited some facial masks that made plain just what was being done in these cases. This department of the university has made great strides in the past few years, and now compares most favorably with similar work in other medical centers.

Medical politics was at high tide during the early days of the Lake County convention. There were several election contests that developed into close races, to which we enter no objection. Several years ago THE JOURNAL carried an editorial deploring the fact that politics had entered into the election of our officers. We believe, however, that these annual contests do much to stimulate interest in our annual sessions, for they usually are friendly battles.

Quite a little interest was shown by Association members in the actions of a man bearing a membership badge and armed with a twenty-two caliber rifle. He was in and out of the Hotel Gary, here and there about the town, all the while carrying his gun. Much speculation was rife about the matter; some thought he was a hoodlum disguised as a physician attending the convention, while others thought he was a down-state physician, carrying the gun for protection. It developed, however, that the mysterious stranger was Dr. Fred Clements, of Evansville, and that the gun was a prize he had won at the trap-shoot. Fearing that "Bunny" Hare possessed signs of kleptomania, Dr. Clements was loathe to put the gun out of his hands. He finally took it over to Valparaiso for safe keeping!

THE PRESIDENT'S PAGE

WALTER J. LEACH

PRESIDENT, INDIANA STATE MEDICAL ASSOCIATION, 1935

May 1, 1862—September 29, 1935

A man of distinction in his community and state, universally revered in his profession.



So be my passing!
My task accomplish'd and the long day done,
My wages taken, and in my heart
Some late lark singing,
Let me be gather'd to the quiet west,
The sundown splendid and serene,
Death.

William Ernest Henley.

SUGGESTIONS FOR 1935-1936 FROM YOUR PRESIDENT-ELECT

R. L. SENSENICH, M. D.
SOUTH BEND

STATISTICS 1935
THE GREATEST CAUSES OF DEATH:
I DISEASES OF HEART AND BLOOD VESSELS
II CANCER
PNEUMONIA, NEPHRITIS, TUBERCULOSIS, DIABETES.

INTRODUCTION

Medical service throughout the coming year will be surveyed from the most critical and, in some instances, unsympathetic viewpoint. Prevention of illness, reconstruction of the handicapped, and mounting mortality in certain diseases, will be much discussed by social service and lay groups. The weakest medical units, be they individuals or organizations, may determine the pattern of reaction entertained by the lay public toward physicians. It will be said of them that they are stubborn and selfish—past years of unselfish service will meet that accusation. The profession may well be proud of its background of brilliant achievement. There must be no basis developed upon which it may be charged that the level of medical service offered to the average man is below desirable standards by reason of negligence or incompetence of medical men.

SUGGESTIONS

It is suggested that diseases of the heart and blood vessels, and cancer, the principal causes of death, be made the subjects for special study in the societies of the state for 1936. It is recommended that emphasis be directed to the diagnosis and management of early stages of these diseases. The two subjects are named for the reason that some medical societies have recently given attention to one or the other of these and might not wish to repeat their programs. By broadening the study to include both, there will be sufficient new ground, and important subdivisions, to interest and occupy the time of all medical societies in the state. Whether the study is to be directed to one or both of the diseases suggested, or the manner in which the subject shall be subdivided for special study, should be determined by the Committee on Graduate Education.

STUDY SCHEME

County Societies: It is proposed that study of the subjects would be conducted in programs of county medical societies, and arranged by the respective program committees.

Interchange of Speakers: A plan providing for the appearance of an essayist upon the program of several county societies would make carefully arranged material, based upon experience, or training, or special interest, available to a larger portion of the profession. Arrangement for these special presentations and transfers would be made through the Committee on Graduate Education of the State Association.

SPRING STUDY SESSION

A spring seminar, or study session, is proposed. This would mark the high point of the winter program. This meeting of two days' duration would be held in Indianapolis. It would be financed upon a registration fee basis. Funds so obtained would be used in procuring the best talent obtainable for the discussion of the diseases studied. The program of this meeting would be an intensive course of lectures and dry clinics, without discussion. Sessions would be held early in the day and would continue late. There would be no scheduled social functions. The meeting described would, for 1936, take the place of the postgraduate meeting, such as has been held each year in some part of the state. It is believed that a program of outstanding merit would be very well attended, not only by the profession of this state, but would in addition attract others from adjoining states.

BACKGROUND FOR STATE-WIDE PROGRAM

Importance to Physicians: Cardiovascular diseases and cancer, which cause the greatest number of deaths, are apparently increasing in frequency. Both are diseases in which every practitioner of medicine must be interested. Early diagnosis determines the duration of life, and it is of the utmost importance that the first physician to see the patient shall recognize the early signs of the disease and know its treatment. The curability of certain cancers, diagnosed early, must be stressed in order to institute early and careful diagnostic effort and appraisal of every case and its treatment. At a recent conference in Paris, looking to the organization of an international society to combat cancer, the Austrian Society for Combatting Cancer reported that percentages, varying from twenty-five per cent in breast cancer to seventy per cent in cancer of the stomach, were diagnosed too late to be amenable to radical operation. Comment reported was that "the low percentage in which a radical operation appeared worthwhile is horrifying." "Enlightenment of the people, and improvement in medical diagnosis, would

appear from these figures to be indispensable conditions." This, as well as similar American reports, will have wide distribution. Failure to obtain a diagnosis early, and a regrettable tendency of the public, and perhaps some physicians, to assume a fatalistic attitude toward all malignancies, regardless of the stage of the disease, are important factors in mortality. Valuable salvage of life and years of useful effort are possible by the methodical study of cardiovascular patients, and the institution of appropriate treatment and a regime of life suited to their conditions. This must be substituted for the results of inadequate study and failure to sufficiently impress certain necessary conditions upon the patient's program of living, if any great reduction in cardiac mortality is to be attained.

PUBLIC INTEREST

Publicity, incident to these two causes of death, has awakened much public interest. This interest will be greatly intensified as a result of reports of many surveys being conducted by various agencies under allotment of federal funds. Lay societies, organized for the control of these diseases, having as one of the objectives early diagnosis and treatment, will build upon any suggestion that average medical examinations are not sufficient to make reasonably accurate diagnoses possible, or that health examinations are infrequently or inadequately made. Many believe that an intensive public campaign, stressing frequent examination to assure early diagnosis of such diseases as cancer and cardiovascular conditions would reduce the mortality to a degree comparable to that attained in tuberculosis. Free diagnostic clinics have been suggested. It is held that tuberculosis clinics were made necessary because of the failure of general practitioners to give sufficient attention to the early recognition of the varying, and often indefinite, symptoms characteristic of early tuberculosis. Well-baby clinics are said by lay groups to have been necessary because of unwillingness of the general practitioner to equip his office with baby scales and enter seriously into the consideration of feeding and other routine matters of well-baby observation. Leaders in these movements have, however, recognized that the public will be better served by many well trained and careful general practitioners, by whom patients will be contacted in early stages of disease, than by a few less readily accessible specialists in public diagnostic agencies. Some such organizations have, for that reason, conducted all their educational work on a "see your doctor" basis.

HEALTH EXAMINATIONS

Early Recognition of Disease: Routine health examinations are, without doubt, the greatest measure in insuring early recognition of disease conditions, and are desirable from the standpoint of both patient and physician. This subject should obviously be considered in connection with the study of the diseases of the heart and vascular system, and cancer.

Health Examinations Repeatedly Advised by Medical Profession: Such examinations have been repeatedly advised by the medical profession and the furtherance of routine examinations was, for a period, made the special activity of the State Association. Although progress may not have been as much as had been hoped, new conditions are developing and must be recognized.

Lay Groups Interested: Lay groups now interested in health activities have long pointed to the desirability of health examinations. Great accentuation of this phase of their activities is bound to develop as a result of social surveys of which there are a great many under way, and more to come, as a result of federal financial background. Propaganda for health examinations will, therefore, at this time, come from lay sources and be removed from any possible suggestion of selfish medical interest.

Public Can Be Educated: There is much evidence to be gained from other activities that the public can be educated to the value of routine health examinations.

Health Examinations Advanced as Argument for Sickness Insurance: The Committee on Costs of Medical Care reported that approximately forty per cent of the people of all incomes did not receive any medical, dental or eye care in a twelve months' period. These, by reason of not having had any health examination, are included in the number said not to have had needed medical care. Although need of adequate health service to prevent illness was advanced as a basis upon which sickness insurance was established in European countries, morbidity and mortality statistics and incidence of preventable disease do not reflect any superior state of public health as compared to America. There is much to suggest that many of those who did not have any medical care did not wish it, and that the major portion of the remaining number did not believe it necessary. A similar neglect seems to exist under sickness insurance. It is not proved that any large portion of this group were unable to obtain such service because of inability to pay. Despite these facts, advisability of health examinations may be advanced as an argument for new systems.

Medical Profession Should Be Ready: Where such arguments are presented, the medical profession should be publicly known as not only advising periodic health examinations but as being ready to make such examinations as public welfare requires. It must be emphasized that no need exists for the establishment of a public agency for that purpose. Personal interest is necessary in periodic health examinations if the patient is to have guidance in his intimate problems. Mass examinations lack this, and possess the potentialities of enlarged objectionable sickness insurance machinery.

Medical Profession Responsible for Standards of Work: The insistence that examination for suspected disease and routine health examinations be made by private physicians, however, carries with it responsibility on the part of the physician. Not only must he be informed in the recognition of disease, but also skilled in the technique of examination and willing to give the attention necessary for that purpose. Complaint is now being made by some individuals that many routine health examinations are indifferently and inadequately made. In some instances it has been said that physicians seem to think that by emphatic assurance to the patient that he is in good health, they make up for the insufficiency of the examination upon which the statement is based. Health examinations should be made for a reasonable fee, and repeated examinations at fixed intervals encouraged.

Standardization of Routine Health Examinations: To facilitate routine health examinations and furnish an adequate history which might contain the early suggestion of beginning disease, it would seem advisable to prepare and make available to physicians a printed form, on one side of which the patient might record his answers to easily understandable questions. The doctor could then add such notes as would be necessary, and on the reverse side record his physical findings and recommendations. The patient generally appreciates an opportunity to relieve himself of his pet worries, and the physician is often richly rewarded for a little advice as to tendency to overweight, insufficient exercise, or bad dietary habits, etc., if no evidence of beginning disease is found. Thought is being given to the preparation of the necessary blanks.

BETTER DIAGNOSES

Better Laboratory Facilities: It has been suggested that federal security act and state public funds, to be expended by the Public Health Department, might be used in assisting in the organization of additional laboratory facilities, under private medical direction, in areas of the state now without such facilities. This would make the consultation of clinical pathologists locally available, and would be more helpful than the extension of more free laboratory service at a distant central laboratory. Such added facilities would make better diagnosis in rural areas possible. Some practicable plan might be developed by the Department of Public Health.

EDUCATIONAL ACTIVITIES

Free Examinations—Cities and Rural Areas: Free examinations and clinics are not alone a problem of the larger centers of population. It is well recognized that free health examinations, in communities of 5,000 population and under, have constituted about seventy-six per cent of the examinations made as against twenty-four per cent in private practice, whereas, in communities of 5,000 population and over, from fifty per cent to seventy-five per cent of similar examinations have been made in private practice.

Free Immunization—Cities and Rural Areas: Immunization against diseases, important as etiologic factors in some heart conditions, has also been in many instances largely taken over by public agencies. In communities under 5,000 population, approximately 53% of the immunizations are taken care of in public clinics, as against 46% in private practice, whereas, in communities of over 5,000 population, from 60% to 73% of similar immunizations are taken care of in private practice. In many instances, especially in smaller communities of this state, immunization of school children has frequently been made the project of some lay body, and immunization of rich and poor has been done, without compensation, by the profession. Activity of organized lay groups, interested in health matters, and of public agencies, will undoubtedly be further stimulated by the administration of the Social Security Act and the medical care of mothers, children and other dependents.

Better Understanding Needed: The free examination of school children, because of tuberculosis and other communicable diseases, is well established as a public activity. However, other free examinations and immunizations might, by reasonable presentation of the case, be restricted to the poor, and those able to pay might be referred to a "see your doctor" basis. The Joint Committee on Health Problems in Education of the National Education Association, and the American Medical Association, in a recent meeting stressed the need of a "better understanding of mutual problems by school administrators and teachers, school physicians, practising physicians, and parents," and pointed out the need of repeated community conferences.

Profession — Lay Organizations — Cooperation: The medical profession might well cooperate in educational activities with lay societies interested in the control of heart diseases and cancer, provided any project advanced be on a "see your doctor" basis. Public educational measures on medical topics should, however, be under medical direction. To that end, the activities of the Publicity Committee of the state association may readily be enlarged to provide material for use more frequently, if desirable, than the present releases. The advisability of presenting, in additional articles, the medical side of the social and economic projects in which the public and the profession would be harmed, was recommended in discussions in the House of Delegates of the American Medical Association. Supplying speakers for lay meetings, when requested, is obviously also a responsibility of the Publicity Committee. The radio is undoubtedly one of the most effective avenues of approach to the average citizen in his home, and is most used by the proponents of measures harmful to the medical profession. Radio facilities should, accordingly, be used insofar as is practicable by the

medical profession to combat this propaganda. All publicity, however presented, must be locally censored and controlled by the authorities of the responsible component societies.

SUMMARY

A program for intensive study of certain diseases, in the medical societies of the state for the winter of 1935 and for 1936, is suggested.

Health examinations and improved diagnostic facilities are discussed.

Forty per cent of the population were reported not to have had any medical service. Very few have routine health examinations. The major portion of the whole population is able to pay for such service.

Public educational activities are discussed.

The medical profession is at the present time under the most critical lay observation. This will be greatly accentuated as a result of the surveys of diseases now being conducted as federal projects, and by various lay groups.

The activities which will be instituted by federal and state cooperation, under the Security Act, will also add much to the discussion of medico-social matters.

There must be no suggestion of lack of medical interest or training, or of inadequacy of the medical care made available to the public by the medical profession.

Every individual physician must be encouraged to offer the best of medical service, and give intelligent consideration to the social and economic problems involved.

The collective action of these individuals in medical societies will be most effective in meeting the problems resulting from developing social and economic trends.

VOICE OF MEDICINE

DEBATES ON SOCIALIZED MEDICINE

(EDITOR'S NOTE: Dr. Verne K. Harvey received an inquiry for information concerning medical service from a Topeka, Kansas, high school. Dr. Harvey has answered the inquiry so ably that we are printing his reply, which includes the questions of the inquirer.)

Dear Sir:

Answering your letter of October second, may I repeat your question, "Is medical service in your state satisfactory?" Yes.

"Do you believe that a system of complete medical service, available to all citizens at public expense, would better medical conditions in your state?" No, it would be costly to the taxpayers, unsatisfactory to the patients, and would lower the standard of medical service.

"What steps, if any, do you believe would most improve medical service in your state?" A system which would give physicians an opportunity to get adequate post graduate training conveniently and without excessive cost.

"Do you believe that the people in your state can afford to purchase complete and adequate medical service through taxation?" Any system of medical treatment paid for by taxation sets up a system of machinery which would bring governmental agencies and politics between the patient and his physician.

"Do you know of any source from which information about the present expenditures of the inhabitants of your state for medical service can be obtained?" I know of no agency in this state where this information could be obtained. I would suggest that you write to the American Medical Association, 535 North Dearborn Street, Chicago, Illinois.

Very truly yours,
VERNE K. HARVEY, M. D., *Director*,
Division of Public Health.

SECRETARIES' COLUMN

ANNUAL CONFERENCE OF SECRETARIES

The annual conference of secretaries will be held at the Columbia Club in Indianapolis, on Sunday, February 2, 1936.

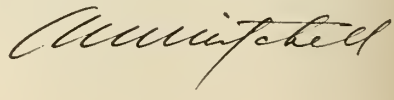
Two speakers on economics have consented to address the conference, namely, Dr. Frederic Elliott, chairman of the New York State Medical Society's Committee on Economics, and Mr. Ross Garrett of Washington, D. C.

It would be wise for you to study the District of Columbia Plan before you hear Mr. Garrett talk. This plan is working in Washington, St. Louis, Kansas City, Missouri, Joplin, Missouri, and will soon be put into operation in Nebraska and Texas. It is good food for thought.

A lot of thinking will be required on the part of members of the medical profession before Congress meets in January. Medical care of the people is going to be considered; our opinions and plans should be well made before that time.

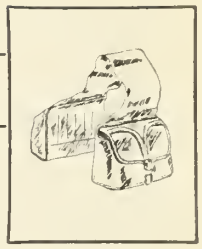
If any of the high school debaters come to you for help on the debatable question of "Socialized Medicine," give it to them. This is one of the finest ways possible for the physicians to present their side of the question to the public. The public must be educated. An educated public moulds public opinion. Public opinion moulds the politicians. Public opinion is worth while.

Your chairman,





INDIANA MEDICINE IN RETROSPECT



L. G. ZERFAS, M. D.
Historian, Indiana State Medical Association

THE MITCHELL-DUNLAP-COE CONTROVERSY

(This article is a continuation of the Mitchell-Dunlap-Coe Controversy, the first installment having been published in the October issue of this JOURNAL. It will be noted that Doctor Coe's communication was not completed and therefore the controversy begins with the remainder of Doctor Coe's letter of May 26, 1830.)

"We come next to notice the course taken in the admission of members, and compare it with the law on the subject.[15] Five were admitted.[16] Dr. Mitchell says they were all gentlemen of good moral character, licensed in other states, and who produced testimonials of having attended a regular course of medical lectures. If this be a fact it may easily be proved, but requires much better evidence than Dr. Mitchell's assertion. But were it a fact, it would not entitle them to admission, even by the doctor's own showing.

"There may be medical societies in some other states as little scrupulous in licensing as this society is in receiving members, and attending one course of lectures is of itself a poor qualification for practice. The law recognized no other licenses than those granted under authority of our own state laws. Doct. Mitchell says: 'The law is explicit. The district society may be composed of persons of good moral character residing in their respective districts, who have been regularly licensed to practice medicine in this state for two years preceding the passage of the act;' and says three of the gentlemen admitted might have joined under that provision, but does not say which three, or how the other two might have got in. Unfortunately the doctor does not seem very acute in understanding law, since in quoting it erroneously he has made it so much against himself that neither he nor Dr. Dunlap could be members under its provisions.

"Dr. Dunlap says: 'There was not an individual admitted to membership who did not come immediately under the letter of the law, that had not attended one full course of lectures, that had not practised a number of years, or that did not give other satisfactory evidence of his capacity to practice'. Where he found this law I cannot guess. There is nothing like it in the statute book of Indiana. Compare it with the law as it reads, which has been published in both our papers as well as in the laws of the last session, and is as follows:—'The said district societies may be composed of all persons of good moral character residing in their respective districts, who have been regularly licensed to practice medicine in this state, or who have been reputable practitioners in the state for two years next preceding the passage of this act, or who have graduated in any medical college in the United States'. I should hope Doctors Mitchell and Dunlap understand the difference between graduating at a medical college and attending a course of lectures, although it would seem from their quotations of the law that they do not.

"Those possessing the qualifications above named in the law, and those only can be members of the society; and any pretended admission to the contrary must be utterly null and void, for it is a well settled principle that when the law defines who may do or enjoy the benefit of an act, all others are prohibited. Now no one I presume except Dr. Mitchell will contend that either of the five, were graduates of any medical college or had been licensed to practice medicine in this state, and the only claim they can have is from that provision of the law which allows any man who has been two years a reputable practitioner of medicine in this state to be admitted by the society, although he has never been licensed and cannot bear an examination. But no society is obliged to admit such, but are only permitted to do it if they see fit. With respect to the three who do not reside in this place I cannot speak with certainty, but I do know that neither of the two who reside in this place, had been in practice here two years before the passing of the act.

"But this provision of the act may perhaps be itself rather incorrect, and having as a committee of the State Medical Society drawn the act which passed the Senate winter before last, and from which the greater part of the present law was copied, it may be proper perhaps to explain the reason of its insertion.

"In the year 1821 the State Medical Society set off a new district including Indianapolis and the newly settled part of the state around it, and appointed all the persons then practicing medicine in it, and one other, to form themselves into a society, as it so happened neither of the physicians residing in this place except myself had been licensed to practice medicine (at least not in this state); but they were thereby admitted to membership in the society, although they acquired thereby no authority to practice medicine. Still

when the new law was drawn I was unwilling it should exclude Drs. Mitchell and Dunlap from the society to which they had so long belonged, and in which I had never known them to shew a disposition to license men I considered unqualified, and after consulting some other members of the State Medical Society, inserted the provision for their especial benefit, from which this has been substantially copied, and for which it seems I get little thanks.

"But the most important consideration for the public is the provision made for the future examination and licensing of candidates to practice medicine; the preamble to the act of last winter states as a defect of the then existing law which it proposes to remedy, that it does not sufficiently guard against licensing unqualified men to practice medicine. And it was the general understanding both by members of the legislature and members of the State Medical Society that the law should neither interfere with steam or root doctors or physicians already in practice, although they were unqualified. Its chief object was to induce young men who study the profession of medicine to do it thoroughly, and that none but such as were well qualified should hereafter be licensed to practice. And if the intentions of the legislature are fulfilled by those having authority to license, the public will eventually have the means of determining who are qualified to practice a profession to which almost every man at some time commits the care of his life.

"In order more effectually to carry this intention into execution and silence the most formidable objection to a medical law, viz: that district societies often license those totally unqualified to practice, the law before mentioned which passed the Senate session before last, provided that all licenses should issue from a board of five censors appointed by the State Medical Society, each member of which board should be a regularly licensed physician, that they should hold their offices for five years, one going out every year, and meet semi-annually at Indianapolis to examine and license candidates. This provision was introduced in conformity with the principles which other states by experience have found necessary to introduce into their laws to prevent licensing unqualified candidates by district societies, often under the influence of a few disposed to send their own students before qualified into practice. Unfortunately the opposition of two or three of the physicians in the lower house* to the bill (said to have arisen from a pledge to their constituents or the fear of their popularity) and which was principally manifested against this section, caused the bill to be lost in the lower house, and probably prevented its being copied into the law which was passed last winter.

"But I much fear that until some similar provision shall be introduced into our laws, there will be found some district societies, which by licensing unqualified men will defeat the principal object of a medical law, and destroy all confidence in the medical licenses granted in our state: and I feel mortified that the district to which I belong has set so bad an example; for although it has licensed no one yet to practice, yet those it has elected to examine and license, afford, it will be seen, a very indifferent prospect.

"The Constitution of Central Medical Society provides for the election of five censors, of whom the president and secretary are exoffici two, and of whom three form a quorum to do business, and the act of 1825 provides that they shall do all the examination and licensing of candidates.

"The president, secretary, and one of the censors, as elected by this illegal meeting of the society, reside in Indianapolis, and neither of the other two censors much short of thirty miles from it, of course it may be expected that these three, Doctors Mitchell, Dunlap, and Tichenor will do all the examination and licensing of physicians for this district. And neither of them have I believe been licensed to practice medicine in this state and I presume not anywhere.

"Doct. Mitchell did, I was informed, go to Corydon and bear an examination before the 3d Medical District Society in Dec. 1821, but was found unqualified to practice, and refused a license, leaving him still unlicensed; his honorary degree of M. D. conferred by the Transylvania University and which has been duly advertised, to the contrary notwithstanding.

"Doct. Dunlap was in practice here several years when it was penal to practice, without license obtained in this state, but never to my knowledge applied for one. And Doct. Tichenor has, I presume, no pretensions to license anywhere. Now, let me ask, what confidence can the public have in the qualifications of a man, licensed by men whose own qualifications have never been tested before competent judges, except to be rejected?

"And what well educated physician would submit to the degradation of an examination by such a board? It is certainly fortunate for the public that they are not legally elected.

"The regulations of the society forbid any license to be delivered by the secretary, until a fee of $5 is paid. Doct. Dunlap says, 'the generosity displayed by that gentleman in his timely warning to the public with respect to physicians paying for license of no value is without a parallel; but when he is made aware that there was no charge made, his designs will be not a little frustrated'. The generosity of the society in making no charge, considering that they granted no license, is truly extraordinary. (It is hoped the Doct. knows the

* Among the physicians in the lower house were: William Trafton of Vanderburg and Warrick counties, Sylvan B. Morris of Shelby and Johnson counties, and Elizur Deming of Tippecanoe County, who voted to kill the bill, and Ezra Child of Washington County; James Brooks Slaughter of Harrison County and Ezra F. Pabody of Jennings County, who voted for it.

difference between license and membership, although he would seem not to from this observation.) The constitution also provides, that licentiates of other medical societies in this state may be admitted to membership, by paying such fee as the society may prescribe, but inasmuch as those admitted were not licentiates of any such society, it was equally *generous* to admit them without charge. But when he goes on to say, 'I shall take the liberty of informing him, that so long as the members dictate for themselves', (or Doct. Dunlap dictates for them,) 'our society will not be made an engine to filch cash from the pockets of our brethren', he must mean to notify the public that the society will in future license charge free.

"And when he adds, 'so in this the Doct. judging others by himself has been led into error', I conclude he knows he will thereby excite great odium against me among his medical *brethren* of the same kidney, as having a disposition not only to examine them, but also to filch *cash* from them as a fee for license to practice.

"It is, I believe, a universal custom in all countries to charge the candidate a fee on being licensed to practice medicine; considerable expense is required to procure a seal, parchment and printing, engraved licenses, &c., for the candidate, and this goes toward defraying it. I have myself besides paying a graduation fee at a medical college, paid a license fee in the states of New-York, New Jersey, and Indiana, and never considered it as filching cash from me.

"And although those who have never received a license may not think it ought to cost anything, I am well satisfied every regularly licensed and well educated physician will consider this popularity-seeking slang about filching cash from the pockets of *brethren* for license as the *ear mark of quackery.*

"In the exposition I have given it has not been my wish to injure these gentlemen in practice, or return evil for evil; it was the offices they have assumed, and the opportunity thereby, of doing injury to the medical character and to the public, which induced me to notify the public of the illegality of their proceedings, and their denial of my statement, and personal abuse, necessarily has led to a more full development of facts and motives.

"For myself I rejoice that I was so far able to control my feelings as, notwithstanding all the evidence of combination and all the insult and abuse I received, faithfully to urge them, by every motive I thought would be effectual to pursue a correct, legal and honorable course, and having so done in vain, can with a clear conscience retire from their connexion. And although all their proceedings are and must continue to be illegal, yet if they will assemble and mutually improve their qualifications for practice, it will so far be a benefit to themselves and patients—and I presume no qualified physician will ever trouble them for a license, although freely offered *without examination, without money, and without price!!!*

"I presume I may also thank the gentlemen for the course they have pursued on another account. There was a mutual sympathy which led them together to combine against me, and I have long been informed that while professing friendship they have been slandering and misrepresenting me, and the public course they have now taken pretty clearly shows they have prepared their consciences for it by private defamation. I have never noticed it, but doubtless they have often injured me in the estimation of others while receiving under the garb of friendship, favors for themselves. Now this public exhibition of their malignity and ill will and the fabrications to which they will resort, will put others on their guard in crediting their kind and friendly hints to my prejudice.

"With respect to the Central Medical Society, if the State Medical Society shall receive its illegally chosen delegates, it will be I conceive in the situation of all those courts and corporations created by law, whose proceedings would be vitiated by the admission of illegal members to participate in and control their proceedings, but if a majority of the delegates from other societies shall be correct and well educated physicians there will be no danger of their doing so.

"ISAAC COE."



Dr. Charles McDougall
(Through the Courtesy of F. N. McDougall)

"To Doct. Isaac Coe:[19]

"Sir: I regret extremely, that in justification of myself I am again compelled to appear before the public to answer your second unwarrantable attack upon me. You have reiterated your first charges and added a number in the last Gazette and Journal. My reluctance to appear before the public does not arise for fear of an investigation. I have neither attacked you nor provoked an attack. And permit me here to assure you, that from you I have nothing to fear. I know as well as all who have read this controversy, that it was com-

menced, and is carried on by you entirely for *personal purposes.*

"If you had only differed with all the members of the Central Medical District Society, in the construction of a legal point, why those indiscriminate torrents of slander and defamation on your professional brethren? The question then would have only been we affirmed, and you denied the legality of the meeting of the district Central Medical Society of the 3d inst., (a copy of the proceedings of which has been already before the public.) But sir, there is not an individual who has read your publication, but must know that your real, and pretended reasons are not the same. And as that society has selected Drs. Dunlap, Beal, and Wylie as delegates to our State Medical Society, a meeting of which is hereafter to take place, it would be improper to adjudicate an undecided case. If those gentlemen be not legally appointed, our proceeding would be vitiated, and the State Society will not recognize them as the representatives of the Central District Society. I shall now dismiss the legality of the meeting of our society, knowing it will be impartially passed upon by the State Society, at the proper time. I cannot however dismiss you yet, without noticing some things as yet unnoticed. In your last budget of slander, defamation, egotism, and boasting, you make some violent thrusts to stab my reputation, but in your zeal to destroy my medical character, you make several false statements, and these in justice to myself and others I feel bound to expose.

"You state I was an applicant before the 3d Medical District Society, held at Corydon in December, 1821, and could not bear an examination and was consequently considered unqualified to practice medicine, and was refused a license! This statement is as false as malicious! But sir, as you go forth slandering your medical brethren in this county, you have told the falsehood so repeatedly, that you may at last believe it. And in proof of the truth of my assertion, the public are referred to Dr. Mitchell of Corydon,[20] and Dr. Smith of Edinburgh. These gentlemen will do me the justice to say that when I was at Corydon during the session of the 2d, (and not the 3d Medical Society) that I was only once in the room during the examination of candidates for license; my extreme bad health made it necessary for me then to retire to my room. I was dangerously ill, and found it impossible to attend again. However, through the politeness of Drs. Mitchell and Fowler,[21] who waited on me at my room, I procured a license, a certified copy of which will be found at the bottom of the page. So much for your rejected applicant! Now, sir, you know that not long after this period, that yourself, Dr. Dunlap, and myself, were appointed officers to examine jointly, and license other physicians, one would rationally presume that it was an acknowledgment from the 2d Medical District Society, that we were considered *licensed* physicians.

I was first licensed to practice medicine by Dr. Frederic Ridgley[22] of Lexington, Ky. to whom I had the honor of being a private pupil 27 years ago, on the first day of July.

If my humble pretensions have gained for me the public confidence, it has only been years of assidous application to the science of medicine and if I have been so highly favoured as to have gained the friendship of the Richardsons,[23] Dudleys,[24] and Drakes[25] of the west, I have no solicitude to obtain the favour, or escape the slander of a *Jersey Schoolmaster.* To gentlemen interested I will show my license and diploma. But I say once for all that I have no wish to waste ammunition on crows.

"You tell the public how 'faithfully you have acted,' 'what insults were offered,' what abuses were bestowed on you by a combination of designing pretenders to medicine. Your hypocritical cant requires a trait of character that few men I hope possess—a hardihood that enables you to make declarations, which are susceptible of contradiction by every gentleman who was in the room. But one thing I will say, I never knew a man who was always crying persecution, proscription, intrigue and evil combination, who was not himself rotten to the very core. My friends, Drs. Dunlap and Tichenor can answer for themselves. After near nine years with Dr. Dunlap and knowing he had regularly studied medicine in one of the first medical schools in New York and procured a license, and in this county justly holds an elevated rank amongst his medical brethren, and that for years he had been the pupil of the celebrated Dr. White,[26] I was, I must confess, surprised that you should strike at him with your slander pole. It will not do, you cannot reach him.

"How in your indiscriminate slaughter, you should strike at Dr. Tichenor, few only could tell, and none justify. He has resided in this place for two years, and has demeaned himself as a gentleman and physician, so far as I know. He was educated and read with Doctor Morrison of Bardstown, Ky., and attended a full course of lectures at the Transylvania University, where he obtained a license. These are the gentlemen whom you have denounced as unlicensed practitioners.

"You state you found us poor. If so you left us in the same situation. You have never been our benefactor. You have indeed been kind to our families, at least to mine, and we have reciprocated the favours, but not boasted of them.

"To your *cupping story,* and I am done. You know it is as false as it is ridiculous. Not one syllable of truth to my recollection is made in your statement with regard to our borrowing your *precious rusty tin cups.* As you are thro'out your whole publication fishing for applause, and half you have written might be by an Indian included in these few words, 'Big man, me, Dr. Coe!' I will publicly acknowledge your skill in cupping. You draw more than blood and water from your pa-

tients, or they do not tell the truth. They complain of a great drawing away of cash. The dexterity you evince in using the cups is admirable, and I must confess I never saw but one rival who could successfully compete with you in their use. He was old Dr. Pompey, a venerable African. It seems invidious to make distinctions between great men, and for fear of doing injustice to either I shall only state his and your claims, and leave the public to judge between you. You cup with tin cups, Dr. Pompey with gourds; you for all diseases, both local and general, he for local diseases only; you indiscriminately apply the cups over every part of the body, he on the parts affected only. It has been perhaps wickedly said that you apply the cups to increase the bill, but Dr. Pompey to cure the patient. Who at last must go against the wall, I shall not determine.

"Your friends have great expectations of you since you became a member of the 'defamation' society, a life-member to the *anti-heretic society*, and ninety-nine other yankey money-getting societies, where you have, at least in one case, condescended to circulate *primers* and *thumbpapers* for the pitiful little sum of $400 per annum; and you have through favour agreed, purely it must be remembered for the love of mankind, to discharge the arduous duty of Treasurer of some dozen of these societies. Pompey begins to complain of your growing influence, and says he will be driven to the necessity of quitting his gourd cups, and in company with Banjor Bob who has very disinterestedly offered his own and the service of his banjor for half the profits, and go out *missionating*.

"Nothing is wanting to consummate this agreement but the presence of their old friend Juber *(a missionary from the south)*, who performs well on the Jaw-Bone. The public has much to expect from yours, and the illustrious trio's services, provided you harmonize and district the state.

"Thus it is seen that a trifling difference of practice between physicians, often produces important results to the public.

"I am, sir,

"S. G. Mitchell."

Certificate

We, the undersigned Censors for the second medical district, have examined Doct. Samuel G. Mitchell, and do hereby permit him to practice Medicine and Surgery in this state, till the next session of this society, to be held at Charlestown, on the 2d Tuesday of June, 1822.

J. Fowler. D. G. Mitchell.

Corydon, Dec. 12, 1821.

I certify that the above is a true copy of the original license in Doct. Mitchell's possession.
May 30, 1830. Austin W. Morris.

(Continued in December issue)

[15] "An Act regulating Medical Societies:

"Whereas, owing to defects in the law regulating the practice of physic in this state, the medical societies which now exist, have never been legally organized, and the provisions of the act are such as do not induce a large portion of qualified physicians to become members of any medical society, or sufficiently to guard against licensing unqualified men, to practice medicine; to remedy which evils,

"Section 1. Be it enacted by the general assembly of the State of Indiana, That the medical society of the State of Indiana, and the several district medical societies, which are now organized in this state, shall each, on causing a record of the name of the society, and of the officers last elected, to be made in the recorder's office of the county where the last election was holden, authenticated by the signature of the president and secretary, be thenceforth considered in law and equity, as legally existing; and all licenses heretofore granted by either of them to practice medicine, shall be considered as legally granted, and former elections of officers, as having been legally made; and the division of the state, by the state medical society into twelve medical districts, as having been legally done; and all the powers and privileges of an act, entitled 'An Act to incorporate medical societies,' etc., approved February 12, 1825, are hereby extended to said societies, and to such others as may be formed under the provisions of the act.

"Section 2. The state medical society, shall have power to organize medical societies in those districts, where none now exists, by the appointment of a president, secretary and three censors, who shall continue in office till the next annual meeting of said district society, and their successors are elected. The state society shall designate some suitable place in said districts, for the first annual meeting of said district societies.

"Section 3. The state medical society shall meet annually at Indianapolis, on the first Wednesday next succeeding the meeting of the legislature; and at such other times as they may appoint. The several district societies, shall meet annually within their respective districts, on the first Monday in May, and at such other times, as they may appoint; the said district societies may be composed of all persons of good moral character, residing in their respective districts, who have been regularly licensed to practice medicine in the state, or who have been reputable practitioners in the state for two years next preceding the passage of this act, or who have graduated at any medical college in the United States; the state medical society and the several district societies, shall have power to make and enforce any by-laws not inconsistent with the laws of this state, and to impose and collect any fines for non-attendance or other delinquencies of their members, that they may deem expedient and proper.

"Section 4. No person not regularly licensed to practice medicine in this state nor being a licensed practitioner in an adjoining state in which he resides, nor at the passage of this act a resident practitioner of medicine of this state, shall be entitled after one year from the passage of this act, to recover anything by law for medicine and professional services as a physician or surgeon; nor shall any person not a member of a district medical society, or practicing physician at the time of taking effect of this act, recover anything for medical counsel, after the expiration of one year from the passage of this act: Provided, that nothing in this act shall be so construed as to affect the right of females to practice midwifery, or apothecaries, or others not professing to prescribe or practice medicine, from selling medicine and recovering payment therefor.

"This act shall take effect and be in force, from and after its passage." (Laws of the State of Indiana passed and published at the 14th Session of the General Assembly held at Indianapolis on the First Monday in December in the year 1829 by authority. Indianapolis. Smith and Bolton, Printers, 1830. p. 91. Also Indiana Journal, Indianapolis, Indiana, March 10, 1830, Vol. 7, No. 359, p. 2, c. 3.)

[16] Edwin J. Beall, Shelbyville; Charles McDougall and William Tichenor, Indianapolis; John Wiley, Edinburgh; and Pierson Murpby, Franklin.

[17] "A bill from the Senate regulating the practice of Physic was referred to a select committee of Messrs. (James Brooks) Slaughter (of Corydon), (Sylvan B.) Morris (of Shelbyville), (Ezra) Child (of Washington county), (William) Traftion (of Evansville), and (Ezra Fitch) Pabody (of Vernon)." Indiana Journal, Indianapolis, January 14, 1829, Vol. 6, No. 290. "Mr. Slaughter from a select committee reported the bill regulating the practice of Physic and Surgery, with amendments . . . Much discussion was occasioned by the bill concerning Medical Societies the gentlemen of tbe profession were not themselves agreed upon its details. It was lost by a considerable majority."

Ibid., January 17, 1829, Vol. 6, No. 291. "Those who voted in the affirmative are (Elizur) Deming (of Lafayette), Morris . . . and Trafton . . . And those who voted in tbe negative are Messrs. Pabody . . . and Slaughter." Journal of the House of Representativcs of the State of Indiana: being the Thirteenth Session of the General Assembly; begun and held at Indianapolis, in said state, on Monday the first day of December, A. D., 1828. Indianapolis, 1828, p. 456.

[18] Isaac Coe, president; Livingston Dunlap, secretary; and Samuel Grant Mitchell, one of the censors, all of Indianapolis. Sylvan Morris of Shelbyville and Hiram Smith of Columbus were the otber two.

[19] Indiana Journal, Indianapolis, Indiana, June 2, 1830, Vol. 8, No. 371, p. 2, c. 5.

[20] Dr. David G. Mitchell was born February 16, 1781 in Washington County, Penn., and died February 24, 1855 at Corydon, Ind. Dr. Mitchell was a graduate of the University of Pennsylvania and was a member of the Medical Society of Philadelphia, 1806 and 1807. He practiced medicine at Harrisburg and Washington, Penn. About 1809 he married Anna Marie Jennings, who was the daughter of Dr. Jacob Jennings of Pennsylvania, and a sister of Jonathan Jennings, the first governor of Indiana. Dr. Mitchell came to Corydon in 1818. He took an active part in organizing the first State Medical Society of Indiana and was a member of the General Assembly in 1838. In cooperation with J. Meredith he published the *Corydon Press* in 1829. He was listed as a member of tbe Board of Trustees of Indiana University in 1839. Following is a letter written to him by Doctor Coe:

"Indianapolis, Jany 7th, 1822.

"Dear Sir:

"In the copy of the resolution of the state medical society granting us authority to form a district society there appears some little informality which seems to render the power incomplete.

"In giving us the resolution, the secretary omitted to mention from what society it emanated and we perceive tbe omission of ye title as president after your name authenticating it.

"There is also what we conceive to be an error in the eastern boundary, it says 'And west of one range of counties east of Franklin, Fayette & Wayne'; now as there are no counties in this state east of these we presume the original resolution says west.

"The only laws of the state granting power to form district medical societies which we have been able to find are those of 1817 & 1819. The 1st forming 3 societies says that now and hereafter each judicial district shall form a medical one, & the last, that the state medical society shall designate the geographical boundaries of the district societies; there may be other acts on the subject, but if not there appears no direct authority lodged any where to form any other than the 3 first societies; if this be the case the revised laws it is to be hoped will he more explicit.

"In the mean time, the power to form new societies may probably by implication rest with the state society willing to adopt this construction & duly sensible of the early attention given us by the state society, we are disposed to carry its intention into effect at the appointed time, but to render our acts valid conceive that our authority should be fully authenticated.

"Will you then if the records of the society are left at Corydon have the goodness to furnish a copy of the resolution in due form & procure Doct. Blanchard's signature as well as affix yr own & transmit to us as early as convenient by mail or otherwise or if Doct. Blanchard has the records, will you be at the trouble of writing to him to do it for us.

"If a private conveyance offers will you also, if the constitution & laws of the state society are printed, do us the favor to send us a copy.

"Doct. Mitchel of tbis place desires his respects.

"In behalf of the physicians of this place.

"I am very respectfully yours,

"ISAAC COE.

"Doctor D. G. Mitchell,

"Corydon, Indiana" English Collection, Indiana State Library.

[21] Dr. James Fowler, graduate of Transylvania University Medical School, 1824; thesis "Indiana Epidemic of 1822-23." From records of Transylvania University.

[22] Dr. Frederick Ridgely, who with Dr. Samuel Brown constituted the first medical faculty of the Medical Department of Transylvania University. See *Journal of the Indiana State Medical Association*, March, 1935.

[23] Dr. William H. Richardson, Professor of Obstetrics, Transylvania University. *Ibid.*

[24] Dr. Benjamin Dudley, Professor of Anatomy and Surgery, Transylvania University. *Ibid.*

[25] Dr. Daniel Drake, Professor of Materia Medica and Medical Botany, Transylvania University. *Ibid.*

[26] Dr. Joseph White, of Cherry Valley, N.Y., was president of the Medical College of Fairfield, N.Y., 1817, and Professor of Surgery in the College of Physicians and Surgeons of the Western District of New York located at that place. He lectured for many years in that institution and professionally was known for his surgical skill and good judgment. He was president of the New York State Medical Society. He died June 2, 1832. Stephen W. Williams, M.D., American Medical Biography, L. Merriam & Co., Greenfield, Mass., 1845. pp. 624-630.

THE SENILE HEART

(Continued from page 585)

vessel producing an atheromatous ulcer with thrombus formation or emboli, or the cholesterol ester breaks up and calcium deposits in the fatty material, making the coronaries patchy, narrowing the lumen, with consequent necrosis and scarring of the myocardium. This narrowing militates against vasodilatation to meet an increase in the demand on the heart muscle, such as physical exertion, cold, or emotional upsets associated with increased pulse rate and elevated blood pressure. When I sit by the bedside of a patient beyond middle life, rest to the arteries is my chief concern, rather than the fantasy of digitalis and the vaunted vaso-dilators.

Soon we shall be convinced that fats do not burn in the flame of the carbohydrates, and that even so late in life the most hopeful outlook lies in discretional indulgence in fats and a reconciliation to our social and financial status.

DIPHTHERIA DEATHS FOR SEPTEMBER, 1935

For the month of September, 1935, there were 11 deaths from diphtheria, which total is the same number as for the corresponding month of last year, and more than any previous other year since 1930, the total for that year being 12. This brings the total for the first nine months of the year up to 62. Ordinarily there are approximately as many deaths during the last three months of the year as there are during the first nine months. Unless a heroic effort is made, there will be approximately 120 deaths from diphtheria this year. This number is much above what we had hoped for. Diphtheria is still with us and apparently will be for some time to come, unless strenuous efforts are made to prevent it.

Jackson County has three deaths for the past month, bringing their total up to five for the year. Lawrence County has four deaths for the first nine months of the year, Marion County has fifteen deaths so far, and Allen County has seven for the year. If it were not for these four counties, the rate would be one of which we might be proud.

A list showing distribution of the deaths for the year and for the month of September, 1935, is given below:

County	No. Deaths Sept., 1935	Total for 1935
Allen	0	7
Bartholomew	0	1
Blackford	0	1
Boone	0	2
Brown	1	1
Clinton	0	1
Crawford	0	1
Dearborn	0	1
DeKalb	1	1
Delaware	0	1
Elkhart	0	2
Grant	0	2
Fayette	0	1
Jackson	3	5
Jefferson	1	1
Knox	0	1
Lawrence	2	4
Lake	0	1
Laporte	0	1
Madison	0	1
Marion	1	15
Monroe	2	2
St. Joseph	0	2
Spencer	0	1
Steuben	0	1
Tippecanoe	0	2
Vigo	0	1
Wayne	0	1
Warrick	0	1
Total	11	62

THURMAN B. RICE, M. D., Chairman,
Diphtheria Prevention Committee.

Under the Capitol Dome

LICENSES GRANTED

Below is a report of the reciprocal licenses granted by the Indiana State Board of Medical Registration and Examination for the period beginning July 1st and ending September 30, 1935:

	Temp. Permit Issued
Arthur G. Blazey	7/1/35
Edward L. Van Aelstyn	7/5/35
John B. Berkebile	7/8/35
Joseph Frank Carlo	7/10/35
John A. Melyn	7/17/35
Robert A. Nason	7/17/35
Russell A. Winters	7/17/35
Raymond F. Carmody	7/17/35
Charles A. Gutzmer	7/17/35
Carl W. Wagar	7/20/35
Harold M. Pritchard	7/25/35
Robert M. McMichael	7/26/35
Archie E. Brown	7/31/35
William Bo Martin	7/31/35
Hugh W. Eikenberry	8/29/35
Wm. Lawrence Daves	8/29/35
Holger M. Anderson	9/27/35
	Permanent Cert. Issued
John E. Graff	7/5/35
Victor H. Mino	7/13/35
Marjorie Eberhart Graham (Married name, Morrison)	7/22/35
Ralph E. Jones	8/1/35
Wm. E. Miller	8/20/35
James R. Hamilton	8/20/35
Philip H. Becker	8/20/35
Carl E. Dillman	8/22/35
John E. Haynes	9/16/35
August L. Fipp	9/26/35

AUTOMOBILE ACCIDENTS

James D. Adams, chairman of the state highway commission, is urging Indiana newspapers to publish all the lurid details of automobile accidents as a means of making more effective the department's safety campaign. Mr. Adams said he believes that if the motorist "is constantly reminded of the tragic deaths and mutilations suffered by occupants of vehicles which are involved in accidents, it should check the inclination to take chances with his own life and that of his passengers."

While the department is attempting to make highways as safe as possible, the major responsibility for safety rests with the drivers, Mr. Adams said.

HUNTING SE ASON

The state conservation department reminds physicians who like to hunt that the open season for rabbits and quail starts November 10. Virgil M. Simmons, conservation commissioner, said that reports indicate a bumper crop of both rabbits and quail.

CENTRAL STATE HOSPITAL POPULATION

The population at the Central State Hospital for the Insane, Indianapolis, showed a slight increase during the last fiscal year, according to the annual report of Dr. Max A. Bahr, superintendent. The increase followed upon the heels of a decline in population in 1934 as compared with the preceding year. The report showed that on June 30, 1935, the population of the instiution was 1,886. Population on the same date in 1934 was 1,840 and in 1933 was 1,850. The average daily population during the last fiscal year was a fraction over 1,768 and in the preceding twelve months was a fraction under 1,762.

A total of 350 new patients were admitted to the institution during the year, and seventy-six were dismissed as having recovered, sixty-six discharged as being improved and sixteen discharged as unimproved. Deaths at the institution during the year numbered 147.

The per capita cost of the maintenance and operation of the hospital during the year was $221.06. The institution's property was valued at $3,068,235.88. This was divided as follows: real estate, $160,000; buildings, $2,090,004; improvements, $136,633.81, and equipment and supplies, $681,598.07.

PREPARATION OF VOUCHERS, FORM S-69, FOR MEDICAL HOSPITAL AND ALLIED SERVICES RENDERED WPA EMPLOYEES

Instructions to Payee

1. Attach authorization for treatment or examination (Special Form CA-16 or CA-17) if it has not already been forwarded to the commission.

2. *An unitemized bill cannot be paid.* The account must be stated in sufficient detail to show clearly the service rendered. The date of each treatment, including year and date and the charge therefor, is required.

3. Medicine and drugs supplied from the physician's own stock may be allowed *only* when such item bears the notation "Supplied from Stock." If not supplied from physician's own stock a receipt therefor is required, otherwise item will be disregarded.

4. *Do not include charges for services rendered by others* unless the person rendering such services was a salaried employee in your employ. Claim for payment for services rendered by others than your salaried employee must be made on a separate voucher by the person who rendered such services. If you have paid another person for services rendered on your order, the amount so paid may be included in your voucher if accompanied by an itemized bill properly receipted.

5. Signature of injured employe must be affixed to voucher. If signature is by mark, it must be witnessed by a person other than payee and must bear full signature and address of witnesses. If signature of employee cannot be obtained, explain why.

6. Special information required:

(a) X-rays—Date of x-ray, number of views and parts of body x-rayed. X-ray negatives should not be sent to the commission unless specifically requested by the commission.

(b) Hospitals—Allowance will be made for the day of admission, but *not* for the day of discharge. The per diem rate includes: General medical and surgical care by the house staff, ordinary nursing, usual medicines, dressings and supplies, routine laboratory tests, and material for plaster casts.

(c) Bills for hospital service, nurses, consultants, x-rays, anesthetic, medicine, appliances, physiotherapy, drugs, etc., must be approved by the physician in charge.

7. All vouchers must be endorsed by the local compensation officer or, in case of federal establishments, the official superior of the injured employe.

THE SOCIAL SECURITY ACT AND PHYSICIANS

According to information received recently from the director of the Bureau of Legal Medicine and Legislation of the American Medical Association, the Social Security Act, approved August 14, 1935, will in its taxing provisions affect physicians and their employees only insofar as they form a part of the group of employers and employees coming within the provisions of the act. Neither physicians generally nor employees of physicians are exempted as such from the act.

The Social Security Act is now law. A few of its provisions are as follows:

I.

Title VIII of the act deals with "Taxes with Respect to Employment." The taxes imposed by this Title relate to income to be received or to wages to be paid during the calendar year 1937 and thereafter.

The following employments are exempted entirely from the operation of this Title:

1. Agricultural labor;
2. Domestic service in a private home;
3. Casual labor not in the course of the employer's trade or business;
4. Service performed by an individual who has attained the age of sixty-five;
5. Service performed as an officer or member of the crew of a vessel documented under

the laws of the United States or of any foreign country;

6. Service performed in the employ of the United States Government or of an instrumentality of the Government;

7. Service performed in the employ of a state, a political subdivision thereof, or an instrumentality of one or more states or political subdivisions;

8. Service performed in the employ of a corporation, community chest, fund, or foundation, organized and operated exclusively for religious, charitable, scientific, literary, or educational purposes, or for the prevention of cruelty to children or animals, no part of the net earnings of which inures to the benefit of any private shareholder or individual.

Wages received by or paid to an individual in excess of $3,000 per annum are exempt from the tax imposed by the Title.

Bearing the above specified exemptions in mind, this Title imposes:

(a) A tax on employees amounting to one per cent of the wages received for the calendar years 1937-1939, one and one-half per cent from 1940-1942, two per cent during the years 1943-1945, two and one-half per cent from 1946-1948, and three per cent after December 31, 1948. The employer is required to deduct this tax from the wages paid his employees.

(b) An excise tax on employers on wages paid, which is equal to and is calculated on the same basis as the tax imposed on employees.

The taxes imposed by this Title will have to be paid by physicians and their employess, unless they come within the exempted classes.

II.

Title IX of the act imposes a further tax on employers. This Title provides that on and after January 1, 1936, any employer, not specifically exempted from the tax imposed by the Title, who has had a total of eight or more individuals in his employ during twenty weeks in the calendar year, each day being in a different calendar week, shall pay for that year an excise tax as follows:

With respect to employment during the calendar year 1936, one per cent of the wages paid; for the year 1937, two per cent; and with respect to employment after December 31, 1937, three per cent.

The following employments are specifically exempted from the operation of the tax imposed by this Title:

1. Agricultural labor;
2. Domestic service in a private home;
3. Service performed as an officer or member of the crew of a vessel on the navigable waters of the United States;
4. Service performed by an individual in the employ of his son, daughter, or spouse, and service performed by a child under the age of twenty-one in the employ of his father or mother;
5. Service performed in the employ of the United States Government or of an instrumentality of the Government;
6. Service performed in the employ of a state, a political subdivision thereof, or an instrumentality of one or more states or political subdivisions;
7. Service performed in the employ of a corporation, community chest, fund, or foundation, organized and operated exclusively for religious, charitable, scientific, literary, or educational purposes, or for the prevention of cruelty to children or animals, no part of the net earnings of which inures to the benefit of any private shareholder or individual.

Physicians who employ during 1936 eight or more employees will be subject to this tax, unless they fall within the exempted classes. An employer subject to the tax imposed by this Title, however, may credit against the tax contributions made by him during the year into an unemployment fund under a state law, but the total credit may not exceed ninety per cent of the tax against which it is credited. Certain other credits are allowed.

III.

The physicians and their employees, and the physicians who are themselves employees, who are subject to the taxes imposed by the Social Security Act will also be potential beneficiaries of the old-age and unemployment benefits provided in the act, not because they are physicians or employees of physicians, but because of the fact that they may come within the category of the beneficiaries named in the act.

IN YOUR December Journal there will be a postal card asking for information and for your suggestions regarding THE JOURNAL. Please watch for it; complete it, and return it to THE JOURNAL. It will be self-addressed and will require no postage.

DEATH NOTICES

WALTER J. LEACH, M. D., president of the Indiana State Medical Association for 1935, died at his home in New Albany, September twenty-ninth. Dr. Leach was seventy-three years of age.

Almost from the time of his entrance into medical practice, Dr. Leach was interested and active in medical society affairs, and was a tireless worker on behalf of his profession. He was an instructor in his specialty, diseases of the eye, ear, nose and throat, in the Louisville Medical College for a number of years. He had taken postgraduate work in Philadelphia, London, and Berlin, and had been in active practice for approximately forty years.

Dr. Leach had served as councilor for his district for a period of twenty-three years, and had been connected with medical association activities for a considerably longer period.

Dr. Leach graduated from the Louisville Medical College, Louisville, Kentucky, in 1897. He was a member of the Floyd County Medical Society, the Indiana State Medical Association, and the American Medical Association.

Numerous eulogies of Dr. Leach were presented during the annual session of the Indiana State Medical Association in Gary, and will be found in the minutes of the meetings in this issue of THE JOURNAL.

ISIDOR J. PROPPER, M. D., of Gary, died September twenty-seventh, aged sixty-seven years. Dr. Propper was a graduate of the Cleveland College of Physicians and Surgeons in 1900, and was a member of the Lake County Medical Society, the Indiana State Medical Association, and the American Medical Association.

FRANCIS J. POWERS, M. D., of South Bend, died September seventeenth, aged sixty-two years. Dr. Powers had been physician for the University of Notre Dame since 1910. He was a member of the St. Joseph County Medical Society, the Indiana State Medical Association, and the American Medical Association. Dr. Powers graduated from the Northwestern University Medical School, Chicago, in 1908.

WILLIAM C. SCHWIER, M. D., of Knox, died September twenty-second. Dr. Schwier was sixty-seven years of age. He graduated from the Louisville Medical College in 1892.

JOHN R. SICKLER, M. D., of Frankfort, died October fourteenth, aged fifty-nine years. Dr. Sickler graduated from the University of Pennsylvania School of Medicine, Philadelphia, in 1902.

EUGENE HOLDEMAN, M. D., of Elkhart, died October fourteenth, aged sixty-one years. Dr. Holdeman had been coroner of Elkhart County for many years. He graduated from the Indiana Medical College of Indiana, Indianapolis, in 1897, and was a member of the Elkhart County Medical Society, the Indiana State Medical Association, and the American Medical Association.

CHARLES F. CLUTHE, M. D., of Evansville, died at his home in St. Petersburg, Florida, October eleventh. Dr. Cluthe was sixty-seven years of age. He had practiced medicine in Evansville nearly forty years. Dr. Cluthe graduated from the Medical College of Ohio, Cincinnati, in 1891.

SPENCER SMITH, M. D., of Leesville, died October twelfth, aged eighty years. Dr. Smith was a graduate of the University of Louisville, Louisville, Kentucky, in 1882. He had retired from active practice.

JAMES A. SNAPP, M. D., of Goshen, died September twenty-eighth, aged seventy years. Dr. Snapp was a member of the Elkhart County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Wayne University College of Medicine, Detroit, in 1891.

JOHN L. BENEPE, M. D., of Anderson, died September twenty-eighth, aged seventy-one years. Dr. Benepe graduated from the Missouri Medical College, St. Louis, in 1887.

THOMAS R. BARKER, M. D., of Danville, died October seventh, aged sixty years. Dr. Barker graduated from the Central College of Physicians and Surgeons, Indianapolis, in 1901. He was a member of the Hendricks County Medical Society, the Indiana State Medical Association, and the American Medical Association.

CARL E. WILLAN, M. D., of Trafalgar, died October first, aged sixty-three years. Dr. Willan was a graduate of the Medical College of Ohio, Cincinnati, in 1897.

MARK D. BATTIES, M. D., of Indianapolis (Negro physician) died October ninth, aged forty-nine years. Dr. Batties was a graduate of the Indiana University School of Medicine in 1910.

CLARENCE A. BALDWIN, M. D., of Peru, died October ninth, aged sixty-four years. Dr. Baldwin graduated from the Homeopathic Medical College of Missouri, St. Louis, in 1899.

HOOSIER NOTES

Dr. A. J. Steffen of Somerset has moved his office into Wabash where he will conduct his practice.

Dr. Neal D. Carter of Indianapolis has located in Lagrange where he will be associated with Dr. H. G. Erwin.

Dr. William F. Gessler of Fort Wayne is associated with Dr. William O. McBride in the Duemling Clinic.

The Indianapolis branch of the American Association of University Women heard Dr. Harold Dunlap of Indianapolis discuss "Socialized Medicine" at their first meeting, for this year, October fifteenth.

Members of the Indiana State Medical Association are invited to attend the twenty-ninth annual meeting of the Southern Medical Association, the second largest medical organization in the United States, which will be held in St. Louis, November 19-22.

Dr. Ben E. Duke of Decatur is limiting his practice to diseases of the eye, ear, nose and throat.

Mr. Albert Stump, attorney for the Indiana State Medical Association, was a speaker before the Calumet Township Medical Society in the Hotel Gary, October fifth.

Dr. Charles E. Holland of Bloomington has been appointed city health officer to succeed Dr. Russell A. DeMotte who resigned.

Dr. E. E. Padgett of Indianapolis addressed the Tipton Kiwanis Club, October fourth. His subject was "Cancer from the Layman's Standpoint."

Dr. Ione Schultz Clayton, who has been practicing in Delphi with her father, the late Dr. J. J. Schultz, has moved to Arkansas City where she formerly practiced.

Miss Dorothea Barnett of Winamac and Dr. David E. Jones of Indianapolis were married in Indianapolis, October sixth.

Dr. James E. McMeel of South Bend has been made medical supervisor and director of Notre Dame University. Dr. McMeel succeeds Dr. Francis J. Powers who died recently.

Dr. George L. Kress has opened offices in Warsaw and will occupy the location of the late Dr. R. E. Phillips.

Dr. J. B. Fattic of Anderson addressed members of the Lions' Club, October third, and told of his 24,000 mile trip through Africa, including Ethiopia.

A meeting sponsored by the Tippecanoe County Medical Society and the Lafayette Home Hospital October fifteenth, was open to the public, the object being to make the public better acquainted with hospital service. Speakers were the Rev. T. F. Williams, whose subject was "The Value of Hospitals as a Community Center," and Dr. Burt Caldwell, executive secretary of the American Hospital Association, whose subject was "The Relation and Importance of Hospitals to Communities."

Honorable David C. Adie, commissioner of social welfare in New York State, will talk on "General Community Planning" at Caleb Mills Hall, Indianapolis, Monday evening, November fourth, at 8:15. There will be no admission charge. Mr. Adie's appearance in Indianapolis is sponsored by the Junior League of Indianapolis as part of the course given under the Council of Social Agencies for Volunteer Social Workers. Interested persons are invited to attend the meeting.

An examination for entrance into the Reserve Corps of the United States Public Health Service in the grade of Assistant Surgeon is announced to be held November 18, 1935. Applicants must not have passed their thirtieth birthday, and must be graduates of a reputable medical college and have completed at least one year of interneship since graduation, or its equivalent. Those desiring permission to take this examination should make request to the Surgeon General, U. S. Public Health Service, Washington, D. C., for the necessary blanks and other information.

DR. M. J. SPENCER of Indianapolis was elected president of the alumni of the old Central College of Physicians and Surgeons at the annual dinner meeting held in the Columbia Club, Indianapolis, recently. Other officers chosen were Dr. John A. Lambert, honorary president; Dr. Max Bahr, first vice-president; Dr. J. R. Burlington, Attica, second vice-president; and Dr. Lillian Crockett Lowder, Indianapolis, secretary, a post she has held more than fifteen years. Speakers at the meeting included Dr. George J. Garceau, Dr. Lowder, Dr. M. O. McCarty of Frankfort, Dr. Frank F. Hutchins, and Representative William H. Larrabee of New Palestine. Dr. Charles S. Goar of Indianapolis was toastmaster.

WARNING

Within the past few weeks, THE JOURNAL has received information concerning impostors in various sections of the state. One man calls upon patients relative to having them admitted to Riley Hospital in Indianapolis, and claims to represent the hospital. In two instances, he has examined patients and criticized the work done by the attending physician. After the patient's confidence is gained, the man attempts to have checks endorsed. Another man (perhaps the same—no accurate descriptions are available) calls himself "Dr. Campbell" and poses as a representative of the Riley Hospital. A third man (also may be the same man) represents himself to be a prominent Indiana physician, says he has had some automobile trouble, and asks to borrow trivial amounts.

SEVENTH DISTRICT MEDICAL SOCIETY

THE Seventh District Medical Society will hold its annual meeting on Tuesday, November 12, 1935, at Indianapolis, with the members of the Indianapolis Medical Society as hosts.

The meeting has been arranged as a combined clinical and demonstration meeting for the afternoon, beginning at one o'clock in the afternoon, at the City Hospital Auditorium. Several clinics have been arranged to provide a choice of material desired by the members and guests. The final afternoon clinic will be a group meeting with cardiac cases demonstrated and discussed by Dr. Paul D. White, prominent heart specialist of Boston, and assistant professor of medicine in the Harvard Medical School. This clinic will start at 4:00 p. m.

The annual dinner will be held at the Athenaeum, Massachusetts Avenue at Michigan Street, at six o'clock, and following the dinner Dr. White will present a paper dealing with the heart.

The Seventh District Medical Society comprises the members of the county societies of Johnson, Morgan, Hendricks and Marion counties. All members are urged to mark November 12 on their calendars and set that date aside for this meeting. Members of other county societies are cordially invited to attend.

THIRD DISTRICT MEDICAL SOCIETY

The Third District Medical Society will hold its meeting at Salem, November 6, 1935, in combination with the Graduate Study Committee of the Indiana State Medical Association. The program will be as follows:

2:00 to 2:30—Beaumont S. Cornell, M. D., Ft. Wayne
Subject: "Failing Heart of Middle Life"
2:30 to 3:15—Charles P. Emerson, M. D., Indianapolis
Subject: "Neoplastic Disease"
3:15 to 3:30—Questions
3:30 to 4:00—E. V. Hahn, M. D., Indianapolis
Subject: "Head Injuries"
4:00 to 4:30—Leon G. Zerfas, M. D., Indianapolis
Subject: "Anemias"
4:30 to 5:00—Foster Hudson, M. D., Indianapolis
Subject: "Obstetrics"
5:00 to 5:15—Questions
6:30 —Dinner
Dr. Roscoe L. Sensenich, M. D. South Bend
Subject: "Cardiovascular Disease"

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories
- Procaine Hydrochloride-Abbott Tablets, 1.14 grains (0.07 Gm.)
- Procaine Hydrochloride-Abbott Tablets, 2.28 grains (0.15 Gm.)
- Ampoules Bismuth Subsalicylate with Butyn-D.R.L., 1 cc.

Robert A. Bernhard
- Saf-T-Top 5% Ferric Chloride in 50% Glycerine, 2 cc. and 15 cc.
- Saf-T-Top Isopropyl Alchohol, 98%, 2 cc. and 15 cc.
- Saf-T-Top Mercurochrome 2 per cent Solution, 15 cc.
- Saf-T-Top Mercurochrome 2 per cent in 25 per cent Glycerine, 2 cc. and 15 cc.
- Saf-T-Top Tincture Metaphen, 2 cc. and 15 cc.

Lee Laboratories
- Rabies Vaccine, Semple Method (Lee)

Lederle Laboratories, Inc.
- Scarlet Fever Streptococcus Antitoxin, "Globulin-Lederle-Modified"
- Refined Diphtheria Toxoid (Alum Precipitated)-Lederle, 0.5 cc. vial packages

Wm. S. Merrell Co.
- Viosterol in Oil-Merrell, Sperti Process
- Ampules Diothane 0.5% in Solution of Sodium Chloride 0.6%, 6 cc.

Winthrop Chemical Co., Inc.
- Salvarsan, 1.2 Gm. tubes

The following products have been accepted by the Council for inclusion in the List of Articles and Brands Accepted by the Council But Not Described in N.N.R. (New and Nonofficial Remedies, 1935, p. 445):

Robert A. Bernhard
- Saf-T-Top Tincture Iodine, U.S.P., 2 cc. and 15 cc.
- Saf-T-Top Tincture Iodine, U.S.P., 3½%, 2 cc. and 15 cc.

INDIANA UNIVERSITY NEWS NOTES

At the dedication October 6 of the hydrotherapeutic pool of the James Whitcomb Riley Hospital for Children, Indianapolis, President William Lowe Bryan of Indiana University spoke as follows:

"When on October 7, 1924, it became my duty and privilege to accept on behalf of the trustees of Indiana University the James Whitcomb Riley Hospital for Children, I noted with greatest satisfaction the cooperation of thousands of citizens with the state in the establishment and maintenance of this beneficent institution. After expressing my gratitude to the great company of donors, I said: 'There is no future event of which I feel more confident than that many more of our people will bring yet more and greater gifts to this health-bringing and life-saving hospital.'

"How wonderfully that prophecy has been fulfilled! Other thousands of our people have, within the eleven years that have passed, brought still greater gifts, and the stream of beneficence never ceases.

"In accepting this therapeutic pool for the trustees of Indiana University I cannot do better than say again, as I said here eleven years ago today: 'My greatest satisfaction lies in the fact that the officers and members of the Riley Memorial Association are to go on through the years working with the official representatives of the state in this hospital to make Indiana what Riley would have loved it to be—the land of healthy, happy children.'"

Motion pictures, sponsored by Theta Kappa Psi, professional medical fraternity at Indiana University, were shown before I. U. medical students October 10. The titles of the films shown were: "Hysterectomy," "Bone Grafting in the Lumbar Spine," and "A Low Cervical Caesarean Section." All medics and pre-medics were invited to attend.

On September 27, President William Lowe Bryan of Indiana University spoke before the nurses of the Ball Nurses' Home, Muncie. An abstract of the talk he gave to the members of the nursing profession is as follows:

WHAT IS NECESSARY FOR THE TRUE SUCCESS OF A NURSE?

(1) Technical training. More and more science must come to the bedside of the sick. Science cannot render its full service to the sick except through physicians and nurses with thorough technical training, a training for which the nurse's three years is all to short.

(2) In addition to the general education which you receive in elementary and high school, you need a better introduction to the world of modern knowledge and culture. In the three and four year pre-medical course one or more years of time should be devoted to general rather than technical subjects. Dr. Gatch and Dr. Myers and other educational leaders say that physicians will succeed better in their practice by devoting more time to general cultural subjects rather than by devoting all the time to technical subjects.

You nurses are at a disadvantage in comparison with the physicians because they have from seven to nine years of preparation for their profession while you have only three.

(3) Integrity and the spirit of service. In every profession there are those who are without integrity and without the spirit of service. Such individuals are a menace to the profession and to the public. No amount of general or technical education is a substitute for honesty and the will to serve.

BOOK REVIEWS

BOOKS RECEIVED

DISEASES OF THE NOSE AND THROAT FOR PRACTITIONERS AND STUDENTS. By Charles J. Imperatori, M. D., F. A. C. S., professor of clinical otolaryngology, New York Postgraduate Medical School, Columbia University, and Herman J. Burman, M. D., instructor of clinical otolaryngology, New York Postgraduate Medical School, Columbia University, New York. 723 pages, with 480 illustrations. Cloth. Price $7.00. J. B. Lippincott Company, Philadelphia and London, 1935.

* * *

TEXTBOOK OF BACTERIOLOGY. By Thurman B. Rice, A. M., M. D., professor of bacteriology and public health at the Indiana University School of Medicine. 551 pages, with 121 illustrations. Cloth. Price $5.00. W. B. Saunders Company, Philadelphia and London, 1935.

* * *

REVIEWS

THE WOMAN ASKS THE DOCTOR. By Emil Novak, M. D., F. A. C. S., associate in gynecology, Johns Hopkins Medical School. 189 pages. Cloth. Price $1.50. The Williams and Wilkins Company, Baltimore, 1935.

This book, which has been written for our female clientele, deals with a topic which at the present time has been subject to much controversy. Dr. Novak presents the known data on this subject in an interesting and readable fashion. It answers, simply and correctly, many of the problems that arise in relation to their reproductive systems. This book holds a much wider usefulness than the title suggests. It can be read with profit by most physicians and it is a book that each medical student should possess.

* * *

THE DOCTOR'S BILL. By Hugh Cabot, M. D. 313 pp. Price $3.00. New York, Columbia University Press. 1935.

This book presents a careful consideration of the problem of obtaining a more even distribution of satisfactory medical care to the general public in the light of the changed economic and social conditions of modern life. A discussion of the various methods employed in this country, continental Europe and Great Britain to solve this problem is included, as also a statement of the principles upon which, in the author's judgment, any changed system of medical practice in this country must be based. No definite plan for altering the conditions of medical practice in the United States is offered.

SOCIETIES AND INSTITUTIONS

COUNTY SOCIETY REPORTS

ADAMS COUNTY MEDICAL SOCIETY members heard Dr. Jerome Sparks and Dr. Lyman T. Rawles of Fort Wayne when their September meeting was held in Decatur.

* * *

CASS COUNTY MEDICAL SOCIETY members met at the Cass County Hospital, Logansport, September twenty-sixth. The subject presented was "Diabetes" and the program included a film supplied by the Eli Lilly Company showing the production of insulin.

* * *

DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY members met at the Hotel Roberts, Muncie, September seventeenth, for a dinner and get-together meeting, with twenty-five present.

* * *

ELKHART COUNTY MEDICAL SOCIETY met in Elkhart, October third, to hear Dr. Edward A. Oliver of Chicago, who talked on "Differential Diagnosis and Treatment of Cancerous Skin Lesions."

* * *

ELWOOD MEDICAL SOCIETY members met at the Elwood Country Club, October fifteenth. Dr. R. A. Solomon of Indianapolis presented a paper on "Newer Developments in Therapeutics."

* * *

FLOYD COUNTY MEDICAL SOCIETY met at New Albany, September twenty-sixth, to hear Dr. Charles P. Emerson of Indianapolis, who talked on "Why So Much Surgery in America?" Dr. J. W. Jackson of Indianapolis spoke on "Cancer." Twenty-seven members and two visitors were present.

* * *

FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY met at the Chamber of Commerce, Fort Wayne, September seventeenth, to hear Dr. Frederick B. Palmer discuss "Essentials That Every Physician Should Know." Attendance numbered forty-two.

On October first the society met at the Fort Wayne Lutheran Hospital when the staff members presented case reports.

At the October fourteenth meeting Drs. L. G. Christian and Harold A. Miller, both of Lansing, Michigan, talked on "Care of the Indigent Sick."

* * *

FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY met at Mudlavia Sanitarium, Kramer, October third. Dr. F. N. Cloyd of Danville, Illinois, talked on "Care of Common Fractures of the Arm and Leg."

* * *

GIBSON COUNTY MEDICAL SOCIETY met at the Hotel Emerson, Princeton, October fourteenth, to hear Dr. C. O. McCormick of Indianapolis discuss "Analgesia in Labor."

* * *

GRANT COUNTY MEDICAL SOCIETY members and members of the Grant County Dental Society went to the Irene Byron Sanatorium near Fort Wayne for a meeting September twenty-fifth. Members of the hospital staff presented a program after dinner.

* * *

GREENE COUNTY MEDICAL SOCIETY held its September meeting in the Freeman Greene County Hospital, September nineteenth. Dr. Frank Gastineau of Indianapolis presented a paper on "Skin Diseases."

HENDRICKS COUNTY MEDICAL SOCIETY met at Danville, September twenty-seventh, to hear M. V. Kahler, M.D., of Indianapolis, discuss "The Hormones." Twelve physicians and their wives were present.

HENDRICKS COUNTY MEDICAL SOCIETY members met September twenty-seventh, near Center Valley, for a dinner meeting. Dr. Karl Ruddell of Indianapolis was the principal speaker.

* * *

INDIANAPOLIS MEDICAL SOCIETY held its first fall meeting at the Athenaeum, October first. A short business meeting was held, and a moving picture of "Thoracoplasty" was presented.

INDIANAPOLIS MEDICAL SOCIETY members heard Dr. R. B. Crohn of the postgraduate department of Columbia University school of medicine, at the Athenaeum in Indianapolis, October fifteenth. Dr. Crohn's subject was "Differential Diagnosis of Diarrheas." Dr. Crohn conducted a gastroenterologic clinic in the auditorium of the Indiana University School of Medicine in the afternoon, preceding the meeting. Attendance numbered approximately 250.

* * *

JAY COUNTY MEDICAL SOCIETY members met at Portland, October fourth, to hear Dr. C. B. Bohner of Indianapolis discuss "Allergy." Attendance numbered eighteen.

* * *

MADISON COUNTY MEDICAL SOCIETY members met at Pendleton, October 21st, with Dr. Vincent A. Lapenta of Indianapolis as the principal speaker. Dr. Lapenta's address was "The Biochemistry of Blood Coagulation and the Clinical Indications for Blood Transfusions." Following the regular meeting, the Auxiliary members and the physicians enjoyed a social evening which was a Gay Nineties costume affair. Dinner was served in Pendleton by the ladies of the Methodist Church.

* * *

MUNCIE ACADEMY OF MEDICINE held a dinner meeting at the Hotel Roberts, October first. Dr. Harold F. Dunlap of Indianapolis talked on "Diagnosis and Treatment of Hyperthyroidism."

* * *

RANDOLPH COUNTY MEDICAL SOCIETY members met at the Randolph County Hospital, September ninth, with Dr. W. S. Dininger as speaker. Dr. Dininger's subject was "Angina Pectoris." Twelve members and four visitors were present.

RANDOLPH COUNTY MEDICAL SOCIETY members met in the office of Dr. R. W. Reid in Union City, October seventh. Dr. I. E. Brenner of Winchester read a paper on "Cerebro-Spinal Meningitis."

* * *

SHELBY COUNTY MEDICAL SOCIETY members heard Dr. J. H. Warvel of Indianapolis at the dinner meeting held in Shelbyville, October second. Dr. Warvel talked about "Endocrine Glands."

* * *

ST. JOSEPH COUNTY MEDICAL SOCIETY held a meeting October first in South Bend. Dr. Joshua M. Gordon of South Bend presented a paper on "Rheumatic Heart." At the October fifteenth meeting, Dr. L. Faltin continued the symposium, presenting another phase of heart disease.

* * *

SULLIVAN COUNTY MEDICAL SOCIETY members were entertained by the Sullivan Rotary Club, October tenth. The speaker was Dr. George J. Garceau of Indianapolis, whose talk concerned the Riley Hospital and the work being done there.

* * *

VANDERBURGH COUNTY MEDICAL SOCIETY members met at the McCurdy Hotel, Evansville, October first, when Dr. B. J. Kirklin of The Mayo Clinic presented a paper.

* * *

WABASH COUNTY MEDICAL SOCIETY members held a business and dinner meeting October second at the Wabash County Hospital as guests of Drs. R. A. Naugle, E. D. Pearson and C. H. Parker. The principal speaker was Dr. Beaumont S. Cornell of Fort Wayne.

WAYNE-UNION COUNTY MEDICAL SOCIETY members met at the Richmond-Leland Hotel, September nineteenth, to hear Dr. J. MacMillan Townsend of Louisville, Kentucky, present a paper on "Irritable Female Bladder and Urethra." Attendance numbered fifty.

A consideration of the proposal of the Wayne County Tuberculosis Association to skin-test school children of high school age was tabled. A committee was appointed to consider making a county "dead-beat" list and a committee was appointed to make arrangements for the Union District Medical Society meeting in Richmond, October twenty-fourth.

INDIANA STATE MEDICAL ASSOCIATION

THE COUNCIL

First Meeting

(Gary Session, October 8, 1935)

The Council of the Indiana State Medical Association convened for a luncheon-business meeting in Room 328, Hotel Gary, Gary, at 12:15 Tuesday, October 8, 1935, with Dr. O. O. Alexander, of Terre Haute, presiding. Roll call showed the following present:

Councilors

1st District—I. C. Barclay, Evansville.
2nd District—H. C. Wadsworth, Washington.
3rd District—H. C. Ragsdale, Bedford.
4th District—H. P. Graessle, Seymour.
5th District—O. O. Alexander, Terre Haute.
6th District—Samuel Kennedy, Shelbyville.
7th District—L. A. Ensminger, Indianapolis.
8th District—M. A. Austin, Anderson.
9th District—F. T. Romberger, Lafayette.
10th District—N. K. Forster, Hammond.
12th District—E. M. VanBuskirk, Fort Wayne.
13th District—W. B. Christophel, Mishawaka.

Officers

R. L. Sensenich, South Bend, president-elect.
A. F. Weyerbacher, Indianapolis, Treasurer.

Executive Committee

W. H. Kennedy, chairman.
H. H. Wheeler.
T. A. Hendricks, executive secretary.

With the unanimous consent of the Council the reading of the minutes of the midwinter meeting of the Council, which was held in Indianapolis on January 13, 1935, was dispensed with as those minutes were printed in the February issue of THE JOURNAL.

The annual councilor reports were accepted as printed in the October JOURNAL.

Dr. Forster, upon behalf of the Tenth District, expressed the pleasure and appreciation of the district in having the state meeting in Gary.

The secretary called attention to the fact that again this year two district meetings were held on the same day, and he asked that every effort be made to avoid these conflicts during the coming year.

Correspondence from a local county medical society and the American Medical Association regarding a member who has been convicted of violating the Harrison narcotic law brought to the attention of the Council and report on the case made by the councilor of the district of which the county medical society is a component part. The Council instructed the secretary to write to the American Medical Association stating that according to the Constitution and By-Laws of the Indiana State Medical Association the matter had been taken up with the Council, the councilor had made an investigation, the local society had refused to take any action, and therefore the Council could take no action in the case.

Resolutions regarding health insurance submitted by a member of one of the component county medical societies for the Council's approval read and analyzed by the Council. It was the consensus of the Council that the actions proposed in these resolutions already had been promulgated by both the American Medical Association and the Indiana State Medical Association, and therefore no further action was necessary.

The secretary read the following letter, which had been addressed to the headquarters office by one of the councilors:

"With the closing on September 30 of the present system of FERA and the turning over of medical poor relief to the township trustees we are confronted with another problem.

"The township trustees in this locality have refused to render any medical aid in cases of an emergency, such as severe fractures or obstetrics, to any person or family who have been taken off of relief and placed on the new PWA work. Many of the men on this work have been working only a few days and the maximum pay in this county is $14 a month. They have large families and when an emergency arises such as I have stated above the trustee flatly refuses to render medical or surgical aid, saying that the county is 'hard-up' and that the commissioners will not okay any such cases unless they are on direct relief. This is making a hardship on the doctor who is called to attend such emergencies.

"Is there any possible way where you can get an opinion from either the Attorney General or the Governor's Commission on Unemployment Relief as to whether or not these trustees can legally provide medical and surgical attendance in cases of necessity, or whether they can be forced to provide such aid?

"I will appreciate it very much if you would use your good influence in looking this matter up, as I feel this is going to be a major problem which many of the doctors in the state will be confronted with."

Mr. Charles Marshall, director of finance of the Governor's Commission on Unemployment Relief, then was introduced, and he discussed at length the status of medical poor relief in Indiana at the present time. He said:

"On September 10 the Governor's Commission on Unemployment Relief notified the township trustees as overseers of the poor that federal aid for direct relief was being withdrawn as of September 30, 1935. On that date the entire responsibility for direct relief went back to the 1,016 township trustees. Immediately some new problems were presented. The Governor's Commission on Unemployment Relief had maintained some degree of uniformity in the handling of medical aid. . . . Due to the increase in the relief burden since the year 1925, the cost of medicinal aid alone in one month exceeds what was formerly spent for all types of relief in a period of three or four months. As a result poor relief has changed from an item that was handled out of the county revenue fund without difficulty to an item that is one of the major functions of government which requires special financing. . . . In December of this year the township trustees of Indiana will hold a convention. At that convention one of the major subjects will be poor relief. Inevitably, since it is one of the hard items to control, medical aid will be brought up for discussion. . . . It seems to me it would be a good idea if a committee from this Association is appointed which could meet with the representatives of the Governor's Commission on Unemployment Relief and work out some sort of a plan which could be presented to the convention of the Indiana Trustees' Association in December for such action as they desire to take. There should be some sort of a formula on which we could get together, a formula which would preserve the family-physician relationship.

"In regard to giving emergency aid the law says that a physician may give necessary emergency aid to any poor person. The next question is whether the person who receives emergency aid is a poor person or not. This is a matter of proof. Generally trustees and the medical profession are reasonable about giving medical aid. . . . The giving of medical aid is subject to prior authorization. The only time when prior authorization is not required is in an emergency.

"The WPA worker is on the same basis as any other person in your community who receives an income of $40.00 or $44.00 a month or the higher rates for semi-skilled and skilled labor of $50.00 and $63.00. If a WPA

worker is unable to pay for medical care or establish credit, then he is in the same position as any other person in the community in similar circumstances. Whenever a person is unable to obtain necessary medical care it is up to the township trustee to see that such necessary medical aid is provided if such person can establish that he is entitled to relief as a poor person under the requirements of the statute. The WPA worker is on the same basis as a grocery clerk who is making $40.00 or $44.00 a month. It is a question as to whether or not a person may establish himself as a poor person with such income as he has. The medical profession should not think of a WPA worker as different from anyone else. Any citizen or any non-resident within the boundary lines of a township is entitled to necessary medical aid if he can establish himself as a poor person. . . . If a doctor renders emergency medical treatment and it is a true emergency and the person is on relief or can establish himself with the trustee as being eligible for relief, the doctor rendering such necessary emergency medical aid has a lawful claim against the township for the reasonable value of such services."

Dr. Austin asked the question, "If a certain member of the family got other work for a day or so, did it have any actual basis in taking men off of relief?"

Mr. Marshall answered, "Under the FERA program, when they received private employment they were taken off of the FERA work because it was a relief program. Under the FERA program it was necessary that the worker establish his need for relief at all times. Because a man received $1.00 or $2.00 outside income he was not taken off of FERA work. But if a member of the family got a job, then the FERA worker was taken off, because the family was no longer eligible for relief.

"There are different methods of giving relief under the trustee system because of the lack of uniform standards. . . . At the present time the relief given is probably more adequate than when the Governor's Commission came into existence."

Dr. Austin made the motion that "through the Council the president of the State Association appoint a liaison committee to confer with the Governor's Commission or the Township Trustees' Association, if it should be advisable." The motion was seconded by Dr. Samuel Kennedy and carried.

Dr. Alexander read the following note from Dr. C. J. Clark, chairman of the Committee on Graduate Education:

"The Committee on Graduate Education has been asked to take part in the program of several district societies at meetings to be held within the next few months. We have some funds left from the Evansville meeting, but if we are to do our part in bringing outstate speakers for the meetings to be held during the remainder of the year, we feel we should be allowed some money.

"These meetings are to be held in conjunction with the following meetings:

"November 6—Third District Society meeting, Salem.

"December 6—Terre Haute Academy of Medicine, Terre Haute.

"The only charges that the committee feels should be made is for the dinner. We refer you to the annual report of this committee for our thought on attempting to make sufficient money to defray expenses of visiting speakers."

A discussion followed, in which the feeling was expressed that this would be a bad precedent to set because if the State Association pays for speakers for these two meetings all county and district medical societies might well expect the State Association, through the Committee on Graduate Education, to finance their local meetings. Dr. Ensminger moved "that the communication which Dr. Clark has addressed to the council body, requesting that funds be set aside from the state treasury to finance out-of-state speakers for district meetings, be rejected and that the communication be answered to the effect that the Council feels that it is not wise to grant such a request." The motion was seconded by Dr. Austin and carried. Dr. Ensminger added, "In that letter to Dr. Clark we should state that the Council is sympathetic with the various district societies in their efforts to bring in out-of-state speakers and conduct interesting programs."

Upon the motion of Dr. VanBuskirk, seconded by Dr. Christophel, Dr. E. M. Shanklin was unanimously re-elected editor of THE JOURNAL for 1936 and Dr. F. T. Romberger was unanimously re-elected a member of the editorial board to serve five years. Dr. Romberger's present term expires December 31, 1935.

Dr. VanBuskirk moved that the president of the Association and the chairman of the Council set the midwinter meeting date of the Council. Motion duly seconded and passed.

The Council adjourned until Thursday morning following the meeting of the House of Delegates.

THOMAS A. HENDRICKS,
Executive Secretary.

Second Meeting

(Gary Session, October 10, 1935)

The second meeting of the Council convened at 10:00 a. m., Thursday, October 10, 1935, in the Venetian Room of the Hotel Gary, immediately upon adjournment of the final meeting of the House of Delegates. The minutes of the previous meeting were not read. Roll call showed the following members present:

Councilors

1st District—I. C. Barclay, Evansville.
2nd District—H. C. Wadsworth, Washington.
4th District—H. P. Graessle, Seymour.
5th District—O. O. Alexander, Terre Haute.
6th District—Samuel Kennedy, Shelbyville.
8th District—M. A. Austin, Anderson.
9th District—F. T. Romberger, Lafayette.
10th District—N. K. Forster, Hammond.
13th District—W. B. Christophel, Mishawaka.

Officers

R. L. Sensenich, South Bend, president-elect, 1935.
E. D. Clark, Indianapolis, president-elect, 1936.
A. F. Weyerbacher, Indianapolis, treasurer.

Letter received from the president-elect of the Philadelphia County Medical Society, Philadelphia, asking that the Indiana State Medical Association go on record favoring Philadelphia as the 1937 meeting place of the American Medical Association was referred by the Council to the Indiana delegates to the American Medical Association.

The following letter from the secretary of the Floyd County Medical Society was read:

"There is one thing I had in mind, that is not to place too much work on our presidents by dragging them all over the state during their administration unnecessarily. We have an example of it now in our most worthy president, Dr. Leach."

The Council approved the sense of this letter and recommended that the Association presidents use their own judgment in making speaking engagements out over the state.

Letter in regard to hospitals in Indiana not being able to handle morphine without a registered pharmacist brought to the attention of the Council. The secretary was instructed to write to the superintendent of the Daviess County Hospital for information in regard to this question.

There being no further business the Council was adjourned.

THOMAS A. HENDRICKS,
Executive Secretary.

HOUSE OF DELEGATES

First Meeting

The first meeting of the House of Delegates convened at four forty-five o'clock, Tuesday afternoon, October 8, 1935, in the ballroom of the Hotel Gary, Gary, the president-elect, Dr. R. L. Sensenich of South Bend, presiding.

Upon the motion of Dr. Walter Kelly, duly seconded, and carried, signed slips were accepted as the roll call. Dr. W. F. Carver, chairman of the Credentials Committee, announced that a quorum was present, and the chairman declared the

House of Delegates open and ready for the transaction of business.

THE CHAIRMAN: In accordance with our regular order of business it becomes necessary for the chairman to make announcement as to the manner of changing the Constitution and By-Laws in order that the body may be familiar with the requirements. The By-Laws may be amended at any annual session by a majority vote of all delegates present at that session after the amendment has laid on the table for one day. The House of Delegates may amend any article of the Constitution by a two-thirds vote of all delegates present at any annual session provided that such amendment shall have been presented in open meeting at the previous annual session and that it shall have been published twice during the year in THE JOURNAL of the Association.

The reading of the minutes of the last meetings of the House of Delegates may be dispensed with provided we have a motion, duly seconded and carried, in which the minutes as printed in the November, 1934, JOURNAL are accepted. (Dr. F. W. Cregor moved that the reading of the minutes be dispensed with; motion seconded by Dr. W. R. Davidson, and carried.)

In order that the organization may be complete in our body the suggestion again will be made that the delegates and alternates to the American Medical Association be invited to be present in the session this year. They may have full privilege of the floor but no power of voting. They are:

Delegates

H. G. Hamer, Indianapolis
R. L. Sensenich, South Bend
Don F. Cameron, Ft. Wayne
F. S. Crockett, Lafayette

Alternates

W. F. Kelly, Indianapolis
E. M. Shanklin, Hammond
W. F. Carver, Albion
G. D. Scott, Sullivan

(Dr. George Daniels made the motion, seconded by Dr. H. S. Leonard, and carried, that the delegates and alternate delegates to the A. M. A. be invited to sit in the House of Delegates with the power to discuss but not to vote.)

The chair at this time wishes to express a word of welcome to the presidents and secretaries of the county medical societies who have been invited to attend this session. As the meeting progresses we wish the county society officers to become familiar with some of the plans that we have under way for the coming year. For that reason they have been invited. I hope we have a goodly number present.

The organization of the House having been completed it becomes the duty of the chairman to call attention to the deaths of those who have been with us so many years and have died in the last year:

Dr. Walter Leach, president;
Dr. John Carmack, who was a member of this House of Delegates for a number of years;
Dr. George Miller, chairman of the Credentials Committee and councilor of the eleventh district.

I will ask that the House at this time stand silently for a few minutes in respect to those who have died during the past year.

In order that the House may proceed with both old and new business, it is necessary to appoint reference committees. I have never in my life done anything so difficult. There are so many good men and such a few places to be filled. . . . In order that we may be sure that the committees are completed, as your name is called will you please stand and remain standing until your committee is completed?

Committee on Reports of Officers

C. J. Clark, Indianapolis, chairman (Marion)
T. C. Eley, Plymouth (Marshall)
A. C. Yoder, Goshen (Elkhart)
George Dillinger, French Lick (Orange)
J. R. Pugh, Hammond (Lake)

Sections and Section Work

Herman Baker, Evansville, chairman (Vanderburgh)
V. L. Turley, Fowler (Benton)
C. C. Crampton, Delphi (Carroll)
H. G. Cole, Hammond (Lake)
Max Bahr, Indianapolis (Marion)

Rules and Order of Business

Walter M. Stout, Newcastle, chairman (Henry)
W. L. Grossman, North Vernon (Jennings)
T. Z. Ball, Crawfordsville (Montgomery)
Will Thompson, Liberty (Wayne-Union)
T. R. Owens, Muncie (Delaware-Blackford)

Medical Education and Hospitals

J. R. Tracy, Anderson, chairman (Madison)
Walter Sherwood, Bedford (Lawrence)
M. E. Klingler, Garrett (DeKalb)
V. E. Wiseman, Greencastle (Putnam)
C. B. Compton, Frankfort (Clinton)

Public Policy and Legislation

M. R. Lohman, Fort Wayne, chairman (Allen)
O. R. Spigler, Terre Haute (Vigo)
G. A. Thomas, Lafayette (Tippecanoe)
P. J. Birmingham, South Bend (St. Joseph)

Publicity

H. G. Morgan, Indianapolis, chairman (Marion)
Paul Garber, South Whitley (Whitley)
W. L. Portteus, Franklin (Johnson)
F. J. McMichael, Gary (Lake)
B. M. Taylor, Portland (Jay)

Hygiene and Public Health

W. F. Kelly, Indianapolis, chairman (Marion)
A. R. Kresler, Rensselaer (Jasper-Newton)
E. O. Asher, New Augusta (Marion)
M. D. Wygant, Mishawaka (St. Joseph)
Ben Moore, Indianapolis (Marion)

Amendments to Constitution and By-Laws

J. M. White, Gary, chairman (Lake)
A. S. Giordano, South Bend (St. Joseph)
J. H. Weinstein, Terre Haute (Vigo)
F. S. Crockett, Lafayette (Tippecanoe)
E. E. Padgett, Indianapolis (Marion)

Credentials

Jon Kelly, LaPorte, chairman (LaPorte)
W. E. Amy, Corydon (Harrison)
W. O. Hildebrand, Topeka (LaGrange)
H. C. McKee, Greensburg (Decatur)

Miscellaneous Business

W. W. Holmes, Logansport, chairman (Cass)
Ira Perry, North Manchester (Wabash)
Earl VanReed, Lafayette (Tippecanoe)
S. C. Darroch, Cayuga (Parke-Vermillion)
O. T. Scamahorn, Pittsboro (Hendricks)

(At this time the chairman introduced Dr. Harold Camp, secretary of the Illinois State Medical Society, who extended greetings to the Indiana State Medical Association from the Illinois Society.)

REPORTS OF OFFICERS

THE CHAIRMAN: Next we have the reports of the various officers. Most of these have been printed in the October JOURNAL but each chairman will receive five minutes to make any additions to the reports already published.

Report of the Executive Secretary. Referred to Reference Committee on Reports of Officers.

Report of the Treasurer. Referred to Reference Committee on Reports of Officers.

Report of Chairman of the Council.

DR. O. O. ALEXANDER: I have nothing to add other than at the meeting of the Council this afternoon Dr. Shanklin was re-elected editor of THE JOURNAL for 1936 and Dr. Romberger was re-elected to succeed himself as an associate editor.

Referred to Reference Committee on Reports of Officers.

(The chairman announced that the president's address would be read on Wednesday morning and would be referred to the Reference Committee on Reports of Officers.)

REPORTS OF STANDING AND SPECIAL COMMITTEES

Committee on Credenttials:

DR. W. F. CARVER: Mr. Chairman, I wish to report 69 delegates, 8 past presidents, the state treasurer, the editor of THE JOURNAL, and 10 councilors present.

THE CHAIRMAN: This report is accepted and referred to the Reference Committee on Credentials.

Executive Committee. Referred to Reference Committee on Reports of Officers.

Committee on Arrangements. Referred to Reference Committee on Miscellaneous Business.

Committee on Scientific Work. Referred to Reference Committee on Sections and Section Work.

Committee on Public Policy and Legislation. Referred to Reference Committee on Public Policy and Legislation.

JOURNAL Publication Committee. Referred to Reference Committee on Reports of Officers.

Bureau of Publicity.

DR. W. N. WISHARD: I have nothing special to add to our printed report, but I just want to call your attention to page forty-five of the handbook and to the fact that the Bureau of Publicity is very much interested in honorably and appropriately recognizing the history and noble acts of four persons who are buried in Indiana soil. On the 30th of last May at Frankfort, Kentucky, a special meeting of the Kentucky State Medical Association was held to honor the memory of Mrs. Jane Todd Crawford, who was the first person ever operated upon for ovarian tumor. For many years after Mrs. Crawford recovered from this operation she was a resident of Indiana. She lived in Sullivan county and was buried in Sullivan county. . . . I am not attempting to recall or recite her history but simply to call attention to the fact that Mrs. Crawford and Mrs. Burnsworth, who was the first person ever to be operated upon for gallstones by Dr. J. S. Bobbs, and Dr. Jonathan Richmond—all four of these people are buried in Indiana soil, and I think we should make some recognition of it. I think we should erect the proper monument to Mrs. Burnsworth and Mrs. Crawford. Four years ago a delegation from the Kentucky State Medical Association came to Sullivan county to pay respects to Mrs. Crawford's memory. I have heretofore suggested that the auxiliary of this society make a pilgrimage to Sullivan county to honor the heroism of Mrs. Crawford. . . . I think we all should make the pilgrimage to honor Mrs. Crawford. . . . Mrs. Burnsworth in 1904 consented to go to Portland, Oregon, and I was requested by the Medical College of Indiana to take her there and present her as the first living person to be operated for gallstones. . . . Mrs. Burnsworth and Mrs. Crawford have put Indiana on the surgical map of the world for all time. Shall we not show them respect as suggested in the report of the Bureau of Publicity?

Referred to the Reference Committee on Publicity.

Committee on Civic and Industrial Relations.

DR. A. F. KNOEFEL: The committee regrets that their services haven't been in more demand. We gather that the doctors of Indiana are not having any controversial trouble with their employers in regard to paying bills in industrial cases. We hope that the members of the Association will feel free to refer disputed claims.

Referred to the Reference Committee on Public Policy and Legislation.

Committee on Medical Education and Hospitals. Referred to Reference Committee on Medical Education and Hospitals.

Committee on Necrology. Referred to Reference Committee on Miscellaneous Business.

Committee on Secretaries' Conference.

DR. A. M. MITCHELL: The next secretaries' conference will be held on February 2, 1936. We hope to make it a better program than we had last year.

Referred to Reference Committee on Miscellaneous Business.

Committee on Graduate Education.

DR. C. J. CLARK: I have but two things to express. One is, this committee feels that it is in the missionary field and it should be supplied sufficient funds to carry on its work. Second, we welcome invitations to various communities at any time, so that we may spread the work of this committee to various parts of the state.

Referred to Reference Committee on Medical Education and Hospitals.

Committee on Diphtheria Prevention. Referred to Reference Committee on Hygiene and Public Health.

Committee on Study of Health Insurance. Referred to Reference Committee on Public Policy and Legislation.

Committee on Veterans' Hospitalization. Referred to Reference Committee on Public Policy and Legislation.

Committee on Study of High School Athletics. Referred to Reference Committee on Hygiene and Public Health.

Public Relations Committee. Referred to Reference Committee on Public Policy and Legislation.

Committee on Lye Burns in Children. Referred to Reference Committee on Hygiene and Public Health.

Committee for the Study of Puerperal Mortality. Referred to Reference Committee on Hygiene and Public Health.

Committee on State Fair. Referred to Reference Committee on Publicity.

Committe on Mental Health. Referred to Reference Committee on Hygiene and Public Health.

Committee on Expert Testimony.

DR. MAX BAHR: Your committee has devoted a lot of time and attention to this particular problem. The correspondence has been voluminous. We have gotten opinions and reports from forty-three states and also a copy of the so-called perfect law of Belgium which was received through the Belgian council at Washington and translated. As much as we have been able to determine from these reports has been incorporated in the written report of the committee. It is the request of this committee that the same or a similar committee be continued for another year to give more time to study this problem.

Referred to Reference Committee on Public Policy and Legislation.

Committee on Prevention of Traffic Accidents. Referred to Reference Committee on Hygiene and Public Health.

Report of Delegates to the A. M. A.

DR. D. F. CAMERON referred the House of Delegates to the detailed reports of the delegates on the February meeting of the A. M. A. which was held in Chicago and the June meeting which was held in Atlantic City which appeared in the March and July, 1935, issues of THE JOURNAL. He said the Chicago meeting dealt mostly with economic subjects while a few of the high points of the Atlantic City session were: (1) Authorization of the appointment of a special committee of investigation to study the subject of birth control from a medical standpoint, and (2) Declaration of the American College of Surgeons that henceforth they will confine their activities to affairs of a scientific character and not venture out to speak for policies that belong to the A. M. A.

Dr. Cameron complimented the State Board of Medical Registration and Examination in joining with the majority in recognizing the National Board of Examiners. "It was more or less of a relief to me," he said, "when I looked at the map of the United States in the scientific exhibit to see that Indiana is no more one of the three or four states which do not recognize the National Board."

Dr. Cameron continued, "Dr. Sensenich nor Dr. Crockett expects me to pass any great compliments to them, still I must say that they are very active in the affairs of the House of Delegates of the A. M. A. They are on important committees and they uphold our state very well and are men of power in the House of Delegates. Dr. Hamer and myself have been rather juniors to them in many ways, and although we enjoy it, I will say that Dr. Crockett and Dr. Sensenich have made special progress in giving Indiana an influential position in the A. M. A. House of Delegates. . . . I believe the members of the House of Delegates of the A. M. A. should be doctors who make the bulk of their living out of the practice of medicine and whose income is derived directly from patients for services rendered them and not for service rendered to other doctors or to other institutions. You can trust them for pretty level-headed action and common sense. In the affairs which have to do with the economic side of the general run of doctors, I will say that I think these affairs are in pretty safe hands. The members of the House of Delegates of the A. M. A. are level-headed fellows, and I am sure you can trust them to have the proper viewpoint for the ordinary practitioner of medicine."

Referred to Reference Committee on Reports of Officers.

Report of Statistician.

DR. A. W. CAVINS: I only wish to request the delegates to accept my report in the spirit in which it was written.

Referred to Reference Committee on Reports of Officers.

Report of Historian. Referred to Reference Committee on Reports of Officers.

Memorial Resolution on the Death of Dr. Walter J. Leach

At the meeting of the Indianapolis Medical Society on October 1, 1935, the president, Dr. C. H. McCaskey, appointed a committee of three to draft suitable resolutions on the death of Dr. Walter J. Leach, a copy of the resolutions to be forwarded to the Indiana State Medical Association and a copy to the family of Dr. Leach.

Dr. Walter J. Leach died on September 29, 1935, at the age of seventy-three, during his presidency of the Indiana State Medical Association.

A native of Sellersburg, Clark County, he was graduated from the Louisville, Kentucky, Medical College and later studied his specialty of eye, ear, nose and throat for forty years. He was a member of the Centenary Methodist Episcopal Church, the Elks lodge, and the Floyd County Medical Society. Later he did postgraduate work in Philadelphia, London and Berlin.

He had been connected with the Indiana State Medical Association in one official capacity or another longer than any other living member of the Association. He served as councilor in his district for over twenty-three years.

We have not only had the advantage of observing the achievements of Dr. Leach through the indirect light of reputation and the charm of distance, but many of us have had the good fortune to be intimately associated with him in the greatest professional interest of his life—the welfare of the Indiana State Medical Association.

In this outstanding instance of professional service, he is surpassed, we believe, by that of no individual in the organization. Whenever questions of efficiency, economy or expedience arose, always the one striking, all-absorbing impulse of his heart was to put foremost the consideration and defense of the humanitarian principles of the medical profession.

Dr. Leach was a man of lofty ideals and purposes and so far as he was able, he carried them through to the end. He was always in touch with the great problems of the age and his untiring devotion to his profession had won him many friends. He encouraged and stimulated those about him, and of his advice and guidance cheerfully gave his best. To these traits, together with his optimism and steadfastness of purpose, his marked success was largely due. When convinced of the correctness of his position, he was uncompromising in a fight for upholding his conviction. He was a man of great amiability and personal popularity.

His life was a continual but glad sacrifice to duty. The strain was greater than he realized and finally he broke under it. He was a noble man, and his memory will always be an inspiration to his many friends. In his passing the medical profession of Indiana has lost one of its most faithful servants.

MAX A. BAHR, *Chairman.*
E. D. CLARK.
HERMAN MORGAN.

(Dr. Bahr moved that this resolution be made a part of the minutes of the House of Delegates. Motion seconded by Dr. Cregor, and carried.)

Unfinished Business

THE CHAIRMAN: It will be recalled that at the French Lick session in 1933 Dr. Weinstein, the president, suggested that the Constitution and By-Laws be codified. He said:

"I would like to make a suggestion to the House, and that is the real necessity of the codification of the Constitution and By-Laws. We have gone on for a number of years with a number of new resolutions and by-laws being passed. There are some mix-ups, some discrepancies. It just appeals to me as for the benefit of our secretary, for the benefit of our committees, and for the benefit of our incoming officers that it really is a necessity, and I would like to have a motion that we have the Constitution and By-Laws codified and printed."

Motion that this be done was made by Dr. Shanklin and seconded by Dr. Kelly, and carried. The codification committee appointed at the time was W. N. Wishard, chairman; J. H. Weinstein, A. W. Cavins; Albert Stump and T. A. Hendricks, ex-officio members. You will recall that any change in the Constitution must be printed and lie over one year, and during that time it must be published the second time. The report of this committee was published in the September, 1934, issue of THE JOURNAL and referred to the Reference Committee on Constitution and By-Laws at the first meeting of the House of Delegates on October 9, 1934. The committee report was approved with corrections by the reference committee. At that time there was no discussion and it is now up for final discussion.

DR. WALTER KELLY: I was chairman of this reference committee which went over this Constitution as codified and revised. I wish at this time to make a motion that the adoption of it be postponed for one year. If this motion is seconded, I will give my reasons. (Motion seconded by Dr. Clark.)

DR. KELLY: This was not only a codification but it was also in some respects a revision. There were a number of changes made in the Constitution. When we met to consider it, there was only one of my committee present. We could not give it the full attention that such an important thing should have had. I have studied this Constitution very carefully during the past year. There are a number of things that it seems to me should be in the Constitution that are not in it at the present time, and while we are codifying it we should do it thoroughly. In the first place, the delegates to the A. M. A. are not listed as officers of the Association. The only reference in the Constitution in regard to their election is simply this, that they shall be elected according to the rulings of the A. M. A. Another thing, the Constitution does not say what constitutes our council districts. . . . I believe that this should have another year's study by a committee who will go over it very thoroughly and will ask for suggestions from the members of this body.

DR. J. H. WEINSTEIN: I don't rise either to condemn or defend the action of the Committee on Recodification of the Constitution and By-Laws. In all probability Dr. Kelly's criticisms are very good. I have no comments to make one way or another. I simply rise here as really a matter of duty, not in any defense of the report of the committee. I do want to say a few words to those who probably do not know of the work which was done and under what methods it was done. Primarily the committee was appointed, as our chairman has said, for a recodification. The committee on starting on the recodification found discrepancies, parts in which there were contradictory statements, and some parts which we felt were

worded rather ambiguously in which simply some change in wording was made. After that was done that was sent out over the state to a number of men whom we thought were representative of every section of the state and men who had had experience, and men who were officers of the Association at the time, asking their opinions and suggestions—Dr. Kennedy, Dr. Wheeler, Dr. Padgett, Dr. Alexander, Dr. Leach, Dr. Shanklin, Dr. Weyerbacher, Dr. Combs, Dr. Davidson, Dr. VanBuskirk, Dr. Sensenich, Dr. Crockett, Dr. Romberger, Dr. Cregor, and Dr. Johnson of Richmond. These suggestions were sent in and as many as could be used were used. This was printed in the September, 1934, number of THE JOURNAL, and in boldface type were put the changes that had been made in the Constitution and By-Laws. We invited and asked for suggestions and you will find in the committee report in the September, 1934, JOURNAL words to the effect that I have just announced, that "after careful search of the minutes of the meetings of the House of Delegates since the revision and adoption of the Constitution and By-Laws in 1926, your committee first collected and correlated all amendments to the Constitution and By-Laws and the standing resolutions. While some of these amendments appeared in the minutes in the form of a resolution, they had in fact been acted upon by the House of Delegates in the same way as formal amendments, and on the advice of legal counsel they were considered binding as amendments." (Dr. Weinstein here enumerated the changes that had been made in the Constitution.) I don't ask that this be acted upon at this time. I simply wanted to state our position in this matter. If it is the sense of the House that this should be laid over, it is perfectly all right with the committee.

I would like to add one word about the By-Laws. I have been corresponding with our secretary and our attorney on that one question. According to my conception of it, according to Dr. Cavins and Dr. Wishard and the attorneys, we actually adopted the By-Laws last year, although it seems to be the impression that the action was to be taken this year, but the action taken last year actually adopted the By-Laws last year. I simply bring this up so that if the House desires that we stand upon that action last year, we take no further action.

THE CHAIRMAN: I understood you to say there had been no changes in the provisions of the Constitution other than transposition of words or clarification.

DR. WEINSTEIN: Most of the changes were for clarification or bringing paragraphs together to make it clearer and more binding. There were no changes in procedure except for one point, that is, for the election of officers. The new section as suggested by one of these fifteen members consulted provides that all officers of the Association be elected on the floor of the House of Delegates and that provision was made in this recodification. There has been a question brought up as to the authority of this committee to make changes or additions to this Constitution. They had no actual authority. Upon consultation with our attorney, it is perfectly permissible for the committee to do this, but it is up to the House to accept them.

DR. CREGOR: I think this committee has done some very laborious work. I think it has the entire confidence of the profession and of the House of Delegates, and I, therefore, move that the motion of Dr. Kelly be laid on the table. (This motion was seconded by Dr. Wishard and Dr. Clark.)

DR. A. C. YODER: What is the purpose of laying the motion on the table?

DR. CREGOR: If Dr. Kelly's motion is voted to be laid on the table, then the question comes on the adoption of the report of the committee.

(On a standing vote, Dr. Cregor's motion was lost.)

(On a standing vote, the motion made by Dr. Kelly was carried.)

THE CHAIRMAN: The motion of Dr. Kelly is carried. The matter will be postponed for one year.

DR. WEINSTEIN: Will Dr. Kelly's motion cover both the By-Laws and the Constitution?

DR. KELLY: The reading of the motion is to the effect that it covers only the Constitution. That is all I had in mind.

THE CHAIRMAN: The House doesn't know whether it adopted the By-Laws or not.

DR. WEINSTEIN: May I read the letter of the attorney?

"The adoption of the new Constitution must be accomplished in the manner provided in the Constitution itself, but the details as to consideration can be decided by the meeting. That is, you can take by consent those articles and sections in which there are no changes and confine the discussion to those articles and sections in which changes have been made, and then after adopting the changes it would be well to adopt the whole Constitution again as a whole, since this new one is being considered as a codification. The Constitution and By-Laws having already been referred to the reference committee it will require no further reference.

"While the matter of procedure as to discussion and votes should in general follow the rules laid down in Roberts' Rules of Order, yet even if there is a departure from those rules it would not affect the validity of the adoption of the new Constitution or of any parts of it so long as the requisite number of votes were cast in favor of the adoption. In other words, the rules under which you operate are as a matter of law regarded as advisory but not mandatory.

"The change in the By-Laws having been effected in the manner provided in the By-Laws themselves for their amendments, needs no further consideration in the Gary meeting."

The decision at Indianapolis was that we take up both the Constitution and the By-Laws for adoption.

DR. KELLY: Since this has now been postponed for one year we should have a committee that should have charge of this matter, and I make you a motion that a committee be appointed by the president to take up the consideration of the Constitution and any amendments that they may see fit to bring in. It should be revised to bring it up to date. (Motion seconded by Dr. J. R. Tracy, and carried unanimously.)

DR. F. T. ROMBERGER: In order to clarify the matter in regard to the Constitution and By-Laws, I hereby move that the By-Laws as published in THE JOURNAL, and the corrections to the same which were acted upon last year and up to this very point today, be considered the By-Laws of the Indiana State Medical Association. (Motion seconded by Dr. Jon Kelly.)

DR. WEINSTEIN: The report of last year says: "The committee disapproved the amendment to By-Law, Chapter III, Section 1, offered by Dr. Romberger, but as the House recommends that it be passed, we will recommend that it be passed. There was one thing stricken out with the consent of the committee—that was that the officer had to be a man in regular practice. I move the adoption of this report as a whole. Seconded, and carried." The Constitution provides that the House of Delegates has authority to add any section it may desire to add.

(On voting, Dr. Romberger's motion was carried.)

New Business

DR. C. N. COMBS: I wish to present a resolution offered by the Sullivan County Medical Society as printed on page 138 of the handbook:

"*Whereas*, Jane Todd Crawford, by her courageous heroism, made possible the first ovariotomy; and

"*Whereas*, The body of Jane Todd Crawford lies buried in Sullivan County; and

"*Whereas*, We feel that some suitable monument should be erected at her grave;

"*Therefore*, We move that our delegate to the Indiana State Medical Association be instructed to bring this matter before the House of Delegates and that he request the appointment at this time of a committee to devise ways and means for a suitable memorial to Jane Todd Crawford."

Referred to the Reference Committee on Publicity.

DR. BEN MOORE presented the following resolution relative to the payment of expenses of delegates to the American Medical Association meetings:

"*Whereas*, Our delegates from our State Association to the Amercian Medical Association convention are honored by being chosen to represent this State Association; and

"*Whereas*, We, too, are honored for having such men represent us; and

"*Whereas*, Our delegates are put to considerable expense and necessary railroad fare and hotel expense; and

"*Whereas*, They have always gladly given their time away from their practice; and

"*Whereas*, The majority of the several associations in the American Medical Association pay whole or part of their respective delegates' expenses;

"*Be it Resolved*, That the Indiana State Medical Association pay the railroad fare and five dollars per diem for the actual number of days in attendance of the A. M. A. convention hy our delegates."

Referred to the Reference Committee on Miscellaneous Business.

DR. E. O. ASHER offered the following resolution regarding the violation of the Code of Medical Ethics of the American Medical Association:

"*Whereas*, The report of the Judicial Council of the American Medical Association, June, 1935, calls attention to the fact that gross violations of the Code of Ethics by individuals, groups and institutions are frequently ignored because no individual member of a society dared jeopardize his own standing by bringing charges; and

"*Whereas*, The American Medical Association desires to make further studies of the best methods to handle this problem;

"*Be it Resolved*, That the Committee on Publicity of the Indiana State Medical Association study this problem in order that they may make suggestions to the American Medical Association which may be helpful in arriving at the best solution of our difficulties in handling violations of the Code of Ethics."

Referred to the Reference Committee on Miscellaneous Business.

DR. LEONARD introduced the following resolution relative to censorship of articles for publication in THE JOURNAL of the Indiana State Medical Association:

"*Whereas*, There are papers read before the State Association that for various reasons should not be published in the State Medical JOURNAL; and

"*Whereas*, It is the custom of the State Medical JOURNAL to publish papers read at its annual session; therefore,

"*Be it Resolved*, That the Council request the editorial board of the state JOURNAL to select only such papers as in its opinion shall be worthy of publication."

Referred to the Reference Committee on Sections and Section Work.

DR. BAHR presented the following resolution:

"*Whereas*, In that birth eontrol has assumed an important place in a discussion of some of our national health problems; and

"*Whereas*, It is the duty of the medical profession to assume its rightful control of this movement; therefore,

"*Be it Resolved*, That the House of Delegates of the Indiana State Medical Association approve the action of the American Medical Association at its last annual session in the appointment of a committee which was delegated to make a year's study of the problem of birth control, and report its findings at the next session of the A. M. A."

Referred to the Reference Committee on Hygiene and Public Health.

DR. WEINSTEIN: I would like to add to that reoslution from Sullivan County the names of Dr. Bobbs, Dr. Richmond, and Mrs. Burnsworth.

DR. O. W. SICKS introduced this resolution:

"*Whereas*, Many of the high schools in Indiana are holding debates upon the subject of the 'Socialization of Medical Practice,' and are constantly appealing to the headquarters office of the State Medical Association for information as to where they may obtain material giving the profession's side of the question; and

"*Whereas*, The A. M. A. has a large amount of printed material upon this subject, which is available;

"*Be it Resolved*, That each county society be urged to obtain a supply of these booklets and place them where they may be easily accessible for use of students preparing for debates upon this subject; and further

"*Be it Resolved*, That when this is done, publicity be given the fact that this material is available, and where it may be obtained."

Referred to the Reference Committee on Publicity.

REPORT OF THE PRESIDENT-ELECT

Dr. E. E. Padgett, president, 1934, took the chair at this time while Dr. Sensenich presented his proposals for 1936. (Dr. Sensenich's complete report is carried on page 605 in this JOURNAL.)

DR. PADGETT: This report of Dr. Sensenich will be referred to the Reference Committee on Reports of Officers.

DR. CLARK: As chairman of the Committee on Graduate Education I would like to propose a resolution in view of Dr. Sensenich's brochure here which you all have in your hands:

"*Be it Resolved*, That the Indiana State Medical Association accept the offer of the Indiana University School of Medicine to take over the last two days of the present postgraduate spring course of the university in Indianapolis to present the postgraduate work as outlined in Dr. Sensenich's suggestion."

Referred to the Reference Committee on Reports of Officers.

Upon motion of Dr. Romberger, duly seconded, the first meeting of the House of Delegates adjourned to Thursday morning, October 10, 1935, at seven o'clock.

HOUSE OF DELEGATES

Second Meeting

The second meeting of the House of Delegates, a breakfast meeting, was held in the Venetian Room of the Hotel Gary, on Thursday, October 10, 1935, with president-elect, Dr. R. L. Sensenich, in the chair. The meeting was called to order at 8:00 a. m.

The roll was called by Dr. W. F. Carver, chairman of the Credentials Committee, and showed the following present:

County	*Delegates*
Adams	Ben E. Duke, Decatur
Allen	M. R. Lohman, Fort Wayne
	Lyman T. Rawles, Fort Wayne
	J. L. Wyatt, Fort Wayne
Bartholomew	M. C. McKain, Columbus
Boone	R. J. Harvey, Whitestown
Carroll	C. C. Crampton, Delphi
Cass	W. W. Holmes, Logansport
Clinton	C. A. Robison, Frankfort
Daviess-Martin	S. L. McPherson, Washington
Dearborn-Ohio	O. H. Stewart, Aurora
Decatur	H. S. McKee, Greensburg
DeKalb	M. E. Klingler, Garrett
Delaware-Blackford	T. R. Owens, Muncie
Elkhart	A. C. Yoder, Goshen
Fayette-Franklin	Ralph Sappenfield, Brookville
Floyd	J. W. Baxter, New Albany
Fountain-Warren	Simeon Lambright, Covington
Fulton	A. E. Stinson, Rochester
Gibson	Carl Clark, Oakland City
Greene	Sam Rotman, Jasonville
Hancock	Jesse E. Ferrell, Fortville
Harrison	W. E. Amy, Corydon
Hendricks	O. T. Scamahorn, Pittsboro
Henry	Walter M. Stout, Newcastle
Howard	R. P. Schuler, Kokomo
Jackson	C. E. Gillespie, Seymour
Jasper-Newton	A. R. Kresler, Rensselaer
Jefferson	N. A. Kremer, Madison
Jennings	W. L. Grossman, North Vernon
Johnson	W. L. Portteus, Franklin
Kosciusko	C. E. Thomas, Leesburg
Lake	H. G. Cole, Hammond
	J. R. Pugh, Hammond
	F. J. McMichael, Gary
	J. M. White, Gary
LaPorte	Jon Kelly, LaPorte
Lawrence	R. B. Smallwood, Bedford
Madison	J. R. Tracy, Anderson

Marion	H. S. Leonard, Indianapolis
	H. K. Langdon, Indianapolis
	O. W. Sicks, Indianapolis
	Roy Lee Smith, Indianapolis
	W. F. Kelly, Indianapolis
	C. J. Clark, Indianapolis
	E. O. Asher, New Augusta
	Max A. Bahr, Indianapolis
	Herman G. Morgan, Indianapolis
Marshall	T. C. Eley, Plymouth
Miami	E. L. Waite, Gilead
Monroe	Fred H. Batman, Bloomington
Montgomery	T. Z. Ball, Crawfordsville
Noble	J. W. Morr, Albion
Orange	George Dillinger, French Lick
Owen	Robert H. Pierson, Spencer
Parke-Vermillion	S. C. Darroch, Cayuga
Pike	George DeTar, Winslow
Posey	W. B. Challman, Mount Vernon
Putnam	V. Earle Wiseman, Greencastle
St. Joseph	A. S. Giordano, South Bend
	M. D. Wygant, Mishawaka
	P. J. Birmingham, South Bend
Shelby	W. D. Inlow, Shelbyville
Tippecanoe	Earl Van Reed, Lafayette
	G. A. Thomas, Lafayette
Vanderburgh	Herman Baker, Evansville
Vigo	O. R. Spigler, Terre Haute
	E. O. Nay, Terre Haute
Wabash	Ira Perry, North Manchester
Wayne-Union	Will Thompson, Liberty
Whitley	Paul A. Garber, South Whitley

COUNCILORS

1st District	I. C. Barclay, Evansville
2nd District	H. C. Wadsworth, Washington
4th District	H. P. Graessle, Seymour
5th District	O. O. Alexander, Terre Haute
6th District	Samuel Kennedy, Shelbyville
7th District	L. A. Ensminger, Indianapolis
8th District	M. A. Austin, Anderson
9th District	F. T. Romberger, Lafayette
10th District	N. K. Forster, Hammond
12th District	E. M. VanBuskirk, Fort Wayne
13th District	W. B. Christophel, Mishawaka

PAST PRESIDENTS

W. N. Wishard, Indianapolis
W. R. Davidson, Evansville
E. M. Shanklin, Hammond
C. N. Combs, Terre Haute
F. W. Cregor, Indianapolis
George R. Daniels, Marion
C. E. Gillespie, Seymour (also delegate from Jackson Co.)
F. S. Crockett, Lafayette
J. H. Weinstein, Terre Haute
E. E. Padgett, Indianapolis

OFFICERS

R. L. Sensenich, South Bend, President-elect
A. F. Weyerbacher, Indianapolis, Treasurer
T. A. Hendricks, Indianapolis, Executive Secretary

Motion was made, seconded and carried that the reading of the minutes of the first meeting of the House of Delegates, held on October 8, 1935, be dispensed with.

The chairman announced the election of officers as the first order of business and read Chapter V of the By-Laws, which follows:

CHAPTER V. ELECTION OF OFFICERS

SECTION 1. The election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last day of the Annual Session.

SEC. 2. All elections shall be by ballot, and a majority of the votes cast shall be necessary to elect. In case no nominee receives a majority on the first ballot, the nominee receiving the lowest number of votes shall be dropped and a new ballot taken.

SEC. 3. Any person known to have solicited votes for or sought any office within the gift of this Association shall be ineligible for any office for two years.

SEC. 4. The term of office, unless otherwise specified, shall be for the fiscal year following the date of election.

THE CHAIRMAN: The chair will receive first nominations for the office of president-elect.

ELECTION OF OFFICERS

PRESIDENT-ELECT

Dr. W. D. Inlow nominated Dr. Walter C. McFadden of Shelbyville; nomination seconded by Dr. Jesse E. Ferrell.

Dr. Max Bahr nominated Dr. E. D. Clark of Indianapolis; nomination seconded by Dr. O. R. Spigler.

Dr. A. S. Giordano moved that the nominations be closed. Motion seconded by Dr. Ferrell, and carried.

The chairman appointed Dr. Will Thompson, Dr. Ferrell, and Dr. J. W. Bowers tellers.

On balloting, Dr. E. D. Clark was elected president-elect for 1936. Dr. R. B. Smallwood moved that the election be made unanimous. Motion seconded by Dr. E. L. Waite, and carried.

THE CHAIRMAN: Dr. Clark is declared president-elect for the ensuing year. I appoint Dr. Max Bahr, Dr. Ira Perry, and Dr. O. R. Spigler to notify Dr. Clark. Next in order of business is the election of a treasurer.

TREASURER

Dr. C. J. Clark nominated Dr. A. F. Weyerbacher to succeed himself; seconded. Moved by Dr. H. C. Wadsworth, seconded and carried, that the nominations be closed and that the secretary cast the unanimous vote of the House for Dr. Weyerbacher for treasurer of the Indiana State Medical Association. Ballot cast by the executive secretary.

THE CHAIRMAN: It now gives me pleasure to introduce the newly elected president-elect of this Association, Dr. E. D. Clark.

DR. E. D. CLARK: Gentlemen, I think this is about the most difficult spot I have ever been in. However, I want you all to know how much I appreciate the great honor of being elected to this high office. I will do my best to live up to your expectations. I am conscious of the magnitude of the job I have assumed. I have no speech to make, for which I know you will be glad. All I can say is that I thank you from the bottom of my heart for this, the greatest honor that can be bestowed on a medical man by this Association.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

THE CHAIRMAN: The next in order of business is the election of delegates to the A. M. A. The holdover delegates and alternates are:

Delegates—H. G. Hamer, Indianapolis; R. L. Sensenich, South Bend.

Alternates—W. F. Kelly, Indianapolis; E. M. Shanklin, Hammond.

The chair will receive nominations for delegate to the American Medical Association to succeed Dr. Don F. Cameron of Fort Wayne.

Dr. M. R. Lohman nominated Dr. Cameron to succeed himself; seconded. Dr. C. N. Combs nominated Dr. A. M. Mitchell of Terre Haute. Dr. E. M. VanBuskirk moved that the nominations be closed; seconded by Dr. Ferrell, and carried. Vote was taken by ballot.

THE CHAIRMAN: Dr. Cameron, having received the majority of all votes cast, is hereby declared delegate to the American Medical Association to succeed himself for the ensuing two years. The chair will now receive nominations for delegate to the American Medical Association to succeed Dr. F. S. Crockett of Lafayette.

Dr. J. L. Wyatt nominated Dr. Charles P. Emerson of Indianapolis; nomination seconded by Dr. F. W. Cregor. Dr. Giordano nominated Dr. Crockett to succeed himself; nomination seconded by Dr. M. C. McKain. As there were no other nominations, the chair declared the nominations closed. The House proceeded to vote by ballot.

THE CHAIRMAN: Dr. Crockett, having received the majority of all votes cast, is elected to succeed himself as delegate to the American Medical Association for the ensuing two years.

ALTERNATES TO THE AMERICAN MEDICAL ASSOCIATION

THE CHAIRMAN: Nominations are in order for alternate delegate to the A. M. A. to succeed Dr. W. F. Carver of Albion.

Dr. VanBuskirk nominated Dr. George Daniels of Marion; seconded. Dr. Lyman T. Rawles nominated Dr. B. D. Myers of Bloomington; nomination seconded by Dr. J. L. Wyatt. Dr. Myers declined the nomination, saying that he thought the office should be filled by a member of the Association who is in private practice. Dr. E. M. Shanklin moved that the nominations be closed and that Dr. George Daniels of Marion be named unanimously as alternate delegate to Dr. Cameron.

Motion seconded by Dr. Ferrell, and carried. The unanimous vote of the House for Dr. George Daniels for alternate delegate to the American Medical Association was cast by the executive secretary.

THE CHAIRMAN: The chair will now receive nominations for alternate delegate to the American Medical Association to succeed Dr. G. D. Scott of Sullivan.

Dr. Smallwood nominated Dr. A. M. Mitchell; seconded. Dr. VanBuskirk moved that the nominations be closed and that the secretary cast the unanimous vote of the House for Dr. Mitchell for alternate delegate to the American Medical Association for Dr. Crockett. Motion seconded and carried. Ballot cast by the executive secretary.

Dr. Daniels and Dr. Mitchell were elected for a period of two years.

ELECTION OF COUNCILORS

The terms of the councilors for the first, fourth, seventh, tenth and thirteen districts will expire on December 31, 1935. Reports were made to the House of Delegates as follows regarding election of councilors for these districts for the coming three years:

First District—To succeed I. C. Barclay, Evansville. Election will take place latter part of this month.

Fourth District—To succeed H. P. Graessle, Seymour. Dr. Maurice McKain of Columbus succeeds Dr. Graessle.

Seventh District—To succeed L. A. Ensminger, Indianapolis. Election will be held at the district meeting in November.

Tenth District—To succeed N. K. Forster, Hammond. Dr. Forster has been elected to succeed himself for a period of three years.

Thirteenth District—To succeed W. B. Christophel, Mishawaka. Election will be held on November 6.

Dr. W. W. Holmes reported that election would be held next week to fill the vacancy left by the death of Dr. George Miller, Logansport, councilor of the eleventh district. This term expires December 31, 1936.

SELECTION OF CITY FOR 1936 MEETING

Dr. Fred H. Batman invited the Association to come to Bloomington.

Dr. George Dillinger, upon behalf of the Third District Medical Society and the Orange County Medical Society, extended an invitation to the Association to come to French Lick.

Dr. Giordano, upon behalf of the St. Joseph County Medical Society, invited the Association to meet in South Bend in 1936.

Dr. J. H. Weinstein moved that, in order to expedite matters, a standing vote be taken. Motion seconded by Dr. L. A. Ensminger, and carried.

On the second vote, South Bend was chosen as the 1936 meeting place for the Association.

REPORTS OF REFERENCE COMMITTEES

REPORTS OF OFFICERS

House of Delegates,
Indiana State Medical Association.
Gentlemen:

After carefully considering the reports of your various officers, we submit the following:

Address of the President: We express our appreciation of the loyal and untiring efforts of the late President Leach. Particularly do we wish to mention his idealism, and his eagerness to prevent the socialization of medicine, as reflected in his presidential address, read posthumously.

Your committee moves to accept the report of the executive secretary and the treasurer. It is gratifying to note an increase in our balance.

Your committee moves to accept the report of the chairman of the Council.

Your committee moves to accept the report of the Executive Committee and wishes to congratulate this committee on its diligent effort to protect the members of the medical profession from undesirable forms of legislation and practice.

Your committee moves to accept the report of the delegates to the American Medical Association.

Your committee moves to accept the report of the statistician but suggests that future reports be made more lengthy.

Your committee moves to accept the report of the historian and believes that he is doing much to interest the profession of this state in medical history. This work entails great effort and expenditure of time on the part of Dr. Leon Zerfas, and we believe it is appreciated.

This committee moves to accept the report of the president-elect and feels that this is a forward step in our graduate education. This will also better enable physicians to give complete medical care, thereby aiding materially in forestalling the socialization of medicine by lay groups.

Your committee moves to adopt the resolution to accept the invitation of the Indiana University School of Medicine to put on a two-day postgraduate course at the university in Indianapolis. In order to clarify the details of this offer, a meeting between the dean of the university and this committee was held. The following details were clarified:

1. The course will be held on any two days to be designated by the society.
2. The president of the Indiana State Medical Association will preside at the meeting.
3. The program to be arranged by the president of this Association, the chairman of the Graduate Committee of this Association, and the dean of the university, with whatever association they may desire.
4. No fee to be charged.
5. The first course to be held in the spring of 1936.
6. Men of national prominence will be secured to fill part of the program.
7. The program will be designed to meet the suggestions as outlined in the report of the president-elect.

Your committee was impressed by the spirit of cooperation on the part of the president of this Association and the dean of the university toward making this course a great success.

We move the adoption of this report as a whole.

C. J. CLARK, *Chairman.*
T. C. ELEY.
A. C. YODER.
GEORGE DILLINGER.
J. R. PUGH.

The motion of the members of the committee for adoption of this report was seconded by Dr. Smallwood, and carried.

SECTIONS AND SECTION WORK

House of Delegates,
Indiana State Medical Association.
Gentlemen:

Report of the Committee on Scientific Work: The program speaks for itself, and this committee wishes to commend the Committee on Scientific Work on the excellence of the program this year.

Resolution Relative to Censorship of Articles for Publication in The Journal of the Indiana State Medical Association: The committee recommends the adoption of this resolution.

HERMAN BAKER, *Chairman.*
V. L. TURLEY.
C. C. CRAMPTON.
H. G. COLE.
MAX BAHR.

On motion of Dr. Kelly, seconded by Dr. Clark, the report was adopted.

RULES AND ORDER OF BUSINESS

House of Delegates,
Indiana State Medical Association.
Gentlemen:

Inasmuch as there was no business referred to this committee, there is no report to make. The committee moves that this brief report be accepted.

W. M. STOUT, *Chairman.*
W. L. GROSSMAN.
T. Z. BALL.
WILL THOMPSON.
T. R. OWENS.

On a second to the motion of the committee by Dr. Ferrell, the report was adopted.

MEDICAL EDUCATION AND HOSPITALS

DR. J. R. TRACY: The committee met and wishes to approve the reports of the Committee on Medical Education and Hospitals and the Committee on Graduate Education as printed in the handbook. I move you that we accept these reports.

On the motion of Dr. M. E. Klingler, this report was accepted as a whole.

PUBLIC POLICY AND LEGISLATION

House of Delegates,
Indiana State Medical Association.
Gentlemen:

Your Reference Committee on Public Policy and Legislation has carefully considered the various reports and moves their adoption, namely:

1. The Committee on Legislation and Public Policy.
2. The Committee on Civic and Industrial Relations.
3. The Committee on the Study of Health Insurance.
4. The Committee on Veterans' Hospitalization.
5. The Committee on Public Relations.

We ask you to defer for one year the report of the Committee on Expert Testimony as requested by Dr. Max Bahr, the chairman of that committee.

At this time everyone is familiar with the numerous questions at issue such as the social securities act, the care of the indigent sick, etc., so we are asking all the medical men of our state to cooperate, not only with their local societies, but with the State Association and the American Medical Association in counteracting these nefarious practices. We commend the various committees for their untiring efforts and hope they will function as zealously in the future as they have in the past.

We would like to emphasize several of the more salient facts mentioned in the committee reports. Firstly, that in each town where there is a high school debating team, we supply the coach and the team with such material as is necessary to combat this type of medical socialization. We urge each county society to appoint a committee to facilitate this phase of the work. Secondly, in view of the fact that some form of hospital insurance is being considered by hospitals in our state, we feel that this State Medical Association, and we as individuals, should take a definite stand against this form of socialization.

M. R. LOHMAN, *Chairman.*
O. R. SPIGLER.
G. A. THOMAS.
P. J. BIRMINGHAM.

Dr. Lohman moved the adoption of this report as a whole; motion seconded by Dr. Wyatt, and carried.

PUBLICITY

House of Delegates,
Indiana State Medical Association.
Gentlemen:

Your committee approves the following resolution which was referred to it:

"*Whereas*, Many of the high schools in Indiana are holding debates upon the subject of the Socialization of Medical Practice, and are constantly appealing to the headquarters office of the Indiana State Medical Association for information as to where they may obtain material giving the profession's side of the question, and

"*Whereas*, The A. M. A. have a large amount of printed material upon this subject, which is available;

"*Be it Resolved*, That each county society be urged to obtain a supply of these booklets and place them where they may be easily accessible for use of students preparing for debates upon this subject; and be it further

"*Resolved*, That when this is done, publicity be given the fact that this material is available, and where it may be obtained."

Your committee wishes also to recommend that the president of the Association appoint a committee of three to prepare a pamphlet setting forth the views and policies of this Association concerning the subject of socialized medicine for use of the members of the Association.

We approve of the report of the Bureau of Publicity as published in the annual report of 1935.

We desire to commend the very effective and fine work which has been done in furnishing the lay public with valuable and scientific information relative to curative and preventative medicine.

Your committee also wishes to recommend that the committee appointed by the president of the Association to work with the Woman's Auxiliary and the committees from the county medical societies to formulate a program and plans for proper memorial tributes to Mrs. Crawford, Dr. Richmond, Dr. Bobbs, and Mrs. Burnsworth be continued.

The committee wishes to compliment Dr. L. G. Zerfas, historian for the Association, for his very thorough and interesting historical articles which have appeared in THE JOURNAL. The presentation of the historical parts contained in the various articles should be an incentive to all county medical societies to appoint an historian to collect and present to their association members the many interesting historical facts with which most every community is richly endowed.

H. G. MORGAN, *Chairman.*
F. J. MCMICHAEL.
PAUL A. GARBER.
W. L. PORTTEUS.

Dr. Morgan moved the adoption of this report; motion seconded by Dr. Davidson, and carried.

HYGIENE AND PUBLIC HEALTH

House of Delegates,
Indiana State Medical Association.
Gentlemen:

1. Report of the Committee on Diphtheria Prevention

There are no particular recommendations to be made in regard to this report. We would urge that they continue their campaign for the immunization of the pre-school child.

2. Report of the Committee on the Study of High School Athletics

It should be remembered that the permanent purpose of athletics is to promote physical well-being in unsound bodies and maintain physical fitness in those that are normal. So often where competitive contests are involved the desire to win overwhelms all other aims. A short time ago a widely advertised question arose as to whether or not high school basketball players should be permitted to participate in three basketball games on the last day of the state tournament. This was answered in the negative by the officials only after (and regretfully so) this committee of the State Association had failed to take the lead in the recommendation. Adequate medical examinations before students are allowed to participate in athletics is essential and the profession should renovate itself and cease signing cards when no or inadequate examinations are made. The youth must be protected against his own ambitions.

3. Report of the Committee on Lye Burns

This committee has made no report except that progress is being made. We feel that a committee making a report of progress should tell us in what way they are making progress.

4. Report of the Committee on the Study of Puerperal Mortality

The report of the committee is well taken and shows their efforts are making more available information on the study of obstetrics. It is our opinion a pamphlet might be brought out that would especially stress the well-established dos and don'ts of good obstetric practice, and when distributed to the general medical profession would aid in improved care of the mother.

5. Report of the Committee on Mental Health

This committee has set forth one of the great problems confronting them, that of taking care of patients needing institutional care who are not indigent but are not financially able to meet the necessary expense of private sanataria. We feel that this is just one more question to which the medical profession must give careful consideration.

6. Report of the Committee on the Prevention of Traffic Accidents

The committee has wisely pointed out that the medical profession must take cognizance of the appalling rise in death rates due to automobile accidents. It is our duty to bring the facts before the proper authorities and aid in the solution of this problem. We would commend the committee's suggestion that a standing committee collaborate with the state authorities and lay organizations who are interested in accident prevention. Further we recommend that our delegates to the American Medical Association bring this matter to the attention of that body.

7. Resolution on approving the study of birth control by the American Medical Association

We approve the following resolution:

"*Whereas,* In that Birth Control has assumed an important place in a discussion of some of our national health problems, and

"*Whereas,* It is the duty of the medical profession to assume its rightful control of this movement; therefore

"*Be it Resolved,* That the House of Delegates of the Indiana State Medical Association approve the action of the American Medical Association at its last annual session in the appointment of a committee which was delegated to make a year's study of the problem of birth control, and report its findings at the next session of the A. M. A."

W. F. KELLY, *Chairman.*
A. R. KRESLER.
E. O. ASHER.
M. D. WYGANT.
BEN MOORE.

DR. KELLY: I want to impress upon the delegates that in approving this resolution we are not approving birth control. This is simply approving the action of the A. M. A. and it is not taking any action in regard to the question. I move you, Mr. Chairman, that this report be accepted. Motion seconded by Dr. Ferrell, and carried.

AMENDMENTS TO CONSTITUTION AND BY-LAWS

House of Delegates,
Indiana State Medical Association.
Gentlemen:

The Reference Committee on Constitution and By-Laws having had nothing referred to them, have no report.

JAMES M. WHITE, *Chairman.*
E. E. PADGETT.
J. H. WEINSTEIN.
A. S. GIORDANO.
F. S. CROCKETT.

On motion made by Dr. White, duly seconded, this report was adopted.

CREDENTIALS

DR. JON KELLY: The Reference Committee on Credentials wishes to approve the action of the standing Committee on Credentials.

On motion of Dr. Kelly, seconded by Dr. Morgan, this report was accepted.

MISCELLANEOUS BUSINESS

House of Delegates,
Indiana State Medical Association.
Gentlemen:

We, the Committee on Miscellaneous Business, beg leave to report favorably upon the reports of the committees on

1. Arrangements
2. Necrology
3. Secretaries' Conference

and the resolution relative to the violation of the code of ethics of the American Medical Association.

We further beg leave to report unfavorably on the resolution regarding the payment of expenses of delegates to the American Medical Association for the following reasons:

a. We think it to be unfair to past delegates to the A. M. A. who have gone at their own expense.

b. We think it would have a tendency to the lowering of the standard of our delegates to the A. M. A. below that of previous years.

c. The honor of being elected a delegate to the A. M. A. should of itself be a sufficient reward for services rendered.

d. The potential danger of seriously depleting the funds of the State Association treasury.

W. W. HOLMES, *Chairman.*
IRA PERRY.
EARL VANREED.
S. C. DARROCH.
O. T. SCAMAHORN.

Dr. Holmes moved that the report be accepted; motion seconded by Dr. Cregor, and carried.

DR. W. R. DAVIDSON: I move that the secretary be directed to formulate resolutions to the Lake County Medical Society for the splendid entertainment that has been afforded at this session and to the press of the cities in this area for its very cordial support. (Motion seconded by Dr. Yoder and carried.)

DR. M. A. AUSTIN: I understand from Dr. Hare that Dr. A. M. Hayden of Evansville is quite ill. Dr. Hayden has been an active member of this organization for over fifty years and I feel that it would be a proper thing for the secretary to send him a suitable message from this House. (The chairman instructed the secretary to do this.)

THE CHAIRMAN: I have two more things to mention; one is that today is Dr. Wishard's birthday. The other—we should devote a few words to the memory of Dr. George D. Miller. Dr. Miller was with us so many years in the position of chairman of the Credentials Committee. I am sure we have missed him even though we have a very able successor to him.

I wish to thank all of you for your kindness, consideration and cooperation throughout these meetings. I have been in a position which has been very difficult, as the responsibilities of this session fell upon me very suddenly at a late date. If there is no further business the chair will entertain a motion to adjourn. (Motion made by Dr. Shanklin; seconded by Dr. Smallwood, and carried.)

The House of Delegates of the Indiana State Medical Association adjourned *sine die.*

GENERAL MEETINGS

Wednesday, October 9th, 9:00 a. m.

The first General Meeting convened at 9:00 a. m., Wednesday, October 9th, in the Ball Room of the Hotel Gary, Dr. R. L. Sensensich, South Bend, president-elect, presiding.

DR. SENSENICH: Two announcements—both of importance: First, please register. Second, I wish to call your attention to the Scientific Exhibit. It is a bit out of the way because of necessity, there being no other space available, in a corner of the same floor as the Commercial Exhibit. We want you especially to see these offerings and we would like you to show your interest by saying something about it, because we feel something more can be done in building up this particular part of the program from year to year.

We will now hear the Invocation, by Rabbi Garry August of Gary.

RABBI GARRY AUGUST: May there shine throughout deliberations that reverence for inherited truth of those who have gone before us; that quenchless thirst for knowledge; that comradeship of men knit together in a common endeavor; that profound sense of consecration to the welfare of humanity, which has ever been the guiding light of the noblest souls in our high calling. Amen.

DR. SENSENICH: I will now call upon Dr. E. M. Shanklin, chairman of the local committee on arrangements, who will offer greetings and introduce the President of the local society.

DR. E. M. SHANKLIN: Mr. President, Members of the Indiana State Medical Association: This is not a speech of welcome that I have in my hand. I have no speech, except to introduce to you the dynamic, go-getting bachelor (and that explains why he is a dynamic go-getter), President of the Lake County Medical Society, who will tell you why you are here. Dr. White.

DR. J. M. WHITE, President Lake County Medical Society: Mr. Chairman, Members of the Indiana State Medical Association: It is a great privilege for me to represent the Lake County Medical Society and extend to you our heartiest greetings and welcome to this convention. In 1928 we had the pleasure of entertaining you, and we have been looking forward since that date to the time when you would return and we might have the opportunity to serve you again. We hope you have enjoyed the entertainment that has been provided for you, as well as that to come in the way of the scientific program.

It would be a great help to your local committee if you would register as early as possible, and especially if you will procure your banquet tickets before noon today so we may know how many reservations to make and be able to make the plans necessary for a successful banquet. I thank you.

DR. SENSENICH: When it was known that Dr. Leach was ill and would probably be unable to attend this session, we were much interested in obtaining, if possible, his Presidential Address. I knew from a personal conversation with him some two weeks previous that he had given much thought to the preparation of this address, and we were very glad to find that even though he would not be able to be here, we could have the pleasure of hearing the message he had prepared for us. Subsequent to his death there was a question as to what should be done, but the Executive Committee felt we should have someone present this address. Dr. Shanklin has kindly consented to read it, and we will have it at this time. The subject is, "The Doctor's Place in Human Society."

Dr. Shanklin read Dr. Leach's paper which is published in this issue of THE JOURNAL.

DR. SENSENICH: Francis Bacon held that every man was indebted to the profession in which he labored for social position and livelihood, and he also held that the only way that obligation could be met was by continuous individual effort for the improvement of the status of that profession. Dr. Leach had a very high sense of his obligation to the profession, and the obligation of the individual to improve the profession. He told me several weeks ago of the preparation of this address, and by the way he mentioned it he showed that he felt it necessary at this time to convey to the profession of Indiana that sense of responsibility, not only from the standpoint of professional attainment, but also from the standpoint of financial status.

We have set aside on the program of this meeting an interval to be given over to the presentation of memorials to Dr. Leach by a few of those who knew him best. I will ask Dr. William N. Wishard, who knew Dr. Leach for many years professionally, to address us for a moment in memory of Dr. Leach.

DR. WILLIAM N. WISHARD, Indianapolis: Mr. President, Members of the Indiana State Medical Association: I feel such a sense of personal loss, such a sense of the seriousness of this occasion, that it is very difficult for me to express my real estimate of the character of Dr. Leach.

He was a modest man; he was a quiet man; he was a man who was eminently dependable. I first knew him well when he became a member of the Council of the Indiana State Medical Association in 1908. I had known of him prior to that time as teacher of physiology in the Louisville Medical College, and also in his special department of eye, ear, nose and throat. And when he became a member of Council I was impressed with the fact that we had a dependable man. He was a remarkably good listener, but did very little talking. The art of listening and the consequent capacity to think about things is one that we do not emphasize enough. Dr. Leach while a member of Council would always listen carefully to the discussion of questions that came before the Council, and at the close of the discussion would quietly and dispassionately sum up the matter and give his own conclusions, and usually they were right.

I met him in 1909 in London, where he was taking postgraduate work at Guy's and St. Thomas' Hospitals. It happened that Dr. Kimberlin of Indianapolis, a former President of this Association, Dr. Cook of New Albany, a well known surgeon, accompanied Dr. Leach and myself to the two hospitals I have mentioned. We worked in different departments, being particularly interested in different subjects, but I was impressed with the thoroughness and carefulness, and the constant application of Dr. Leach, and during the several years during which we served together on the Council after this trip to London, those characteristics were emphasized; they were outstanding in him.

This is the second time, if my memory is correct, when the Indiana State Medical Association has had occasion to mourn the death of a president-elect. This time we are fortunate in having the message of our departed friend in his Presidential Address. It will be worth reading and considering, worthy of use as a guide. Some forty years ago Dr. E. S. Elder of Indianapolis was elected President of this Association, and died the following day. These two outstanding incidents are supplemented by one, I think in 1862, when Dr. Sloan, also of New Albany, became ill and resigned as President. That was during the Civil War period, when the meetings of the Indiana State Medical Association were very small indeed.

In expressing my own appreciation, my own regret at the passing of our dear friend, I only speak the sentiments of you all, and I am sure there are others who will be glad to supplement what little I have said.

DR. SENSENICH: During his presidency Dr. E. E. Padgett had occasion to be in constant touch with Dr. Leach, who was then serving as President-elect. I will call on Dr. Padgett.

DR. E. E. PADGETT, Indianapolis: Mr. President and Fellow Members: When I was asked to speak at this time in tribute to Dr. Leach, I was assigned a task that is by no means easy, for since I learned of his untimely death a short ten days ago my soul has been growing close to the surface, and if I falter in my feeble effort it is because I stand in the position of a man who has lost a friend, a very good friend. And you, too, gentlemen, have lost a good friend, for Dr. Leach above all else was loyal.

When I first came into the House of Delegates as a youngster fifteen years ago, Dr. Leach was there, a pillar of strength. When a few years later I was permitted to join the Council of this Association, Dr. Leach was there representing his District. For more than twenty years he served in that capacity, representing his District, and I believe that is a record equalled by very few men in our Association.

I knew him of course better as President-elect and as President of our Association, and through my contacts with him and my acquaintance there is indelibly stamped upon my mind the characteristics that marked this man. In the first place, he was of sterling character. I do not believe there was a man, woman or child in the world into whose face Dr. Leach could not have looked without reason to falter. In the second place, he had, if you please, bull-dog tenacity. In other words, he had a will of his own and stood for what he believed to be right; he was never swayed from his purpose except for good reason. In the third place, he was as loyal to organized medicine as he was to his country and his God. In this life such virtues do not go unrewarded, and Dr. Leach was respected in his community, loved by his friends, and honored by his colleagues. I happen to know from private conversations with Dr. Leach that he regarded as the crowning point of his professional life his elevation to the presidency of this Association, and I shall always remember with a feeling of reverence the real humility and at the same time the genuine enthusiasm with which Dr. Leach proceeded to carry out the duties of this office.

This address that has been read to us I happen to know was not in written form as late as two weeks before the beginning of his last illness, and now we have had that wonderful message from his pen. It must have been written, or at least finished in part, on what proved to be his deathbed.

Gentlemen, the leader died in harness! Mortal man can do no more.

DR. SENSENICH: We also have with us this morning one of Dr. Leach's neighbors, a professional man who has been for many years his neighbor in the city of New Albany, Dr. William L. Starr.

DR. WILLIAM L. STARR, New Albany: Mr. Chairman, and Members of this Association: To me has been given the privilege, a sad one, however, of paying tribute to the mem-

ory of Dr. Walter J. Leach. I speak as a colleague, and as a friend of many years standing; also I speak in the interest of our local society in the little city of New Albany, on the banks of the Ohio.

When I heard this address read my heart was saddened, for I do not know of anyone much nearer than I have been to Dr. Leach, and a good friend for so many years. I shall surely miss him. When I look at his picture in the program I miss the happy smile, the cordial hand-clasp, and I feel that we have missed so much that he could not have been here to deliver this address.

I speak of the human side of Dr. Leach. He was not only a very dear friend, but he was a neighbor. I was particularly impressed when Dr. Leach returned after his election to the presidency of this great State Association, with his speech before the local society. Dr. Leach has been said to be very modest in manner, and I was notably impressed by that fact, and the seriousness with which he accepted this position. He was happy in the fact that he had reached this eminent position in this State, the highest that can be given, but withal there was a look of sadness on his countenance that seemed unnatural, and he said that he felt his incompetency to attend to the duties of the position; that it was a great task, but hard to carry through. And I have felt this way all along about Dr. Leach. Coming events cast their shadows before, and who knows but what Dr. Leach had a premonition that he was under a shadow that might eventually turn into eternal darkness.

I knew him personally through long association. With his work as a teacher of medicine and as a scholar, we are all familiar, and nothing I can say will add to it.

In closing this brief memorial may I be permitted to quote from Gray's Elegy:

"The boast of heraldry, the pomp of pow'r,
And all that beauty, all that wealth e'er gave,
Await alike the inevitable hour.
The paths of glory lead but to the grave."

Peace to his ashes!

DR. SENSENICH: I wish to pay tribute to Dr. Leach and to add my voice regarding my own experience with him in the year we have been associated, he as President and I as President-elect of this Association. Unfortunately, Dr. Leach's health was bad for the greater part of that time, but in every question that was taken up he showed such a generous attitude, a spirit of cooperation, and the most wholehearted support of everything that was advanced, whether it was his own suggestion or something that came from some other source—one thing would seem to determine Dr. Leach's attitude toward it—was it good for the profession, or good for the State Association. If so, he was wholeheartedly for it, even though too ill to cooperate in its active advancement.

In behalf of the Association, while this is but a feeble gesture of what we feel toward Dr. Leach's memory, I should like to present to the family this medal, on which Dr. Leach's name is engraved, and the badge which is worn by the President during the time of his incumbency as President at the annual session. Dr. Starr, I wish you would convey these to the family as a memorial.

DR. WILLIAM L. STARR: I thank you on behalf of the family.

The scientific program then was taken up as follows:

Dr. Isaac A. Abt, Professor of Pediatrics, Northwestern University Medical School, Chicago, read a paper entitled "Management of the Infant During the First Three Months of Life."

Dr. Ralph Milton Waters, Professor of Anesthesia, University of Wisconsin Medical School, Madison, Wisconsin, read a paper entitled "Inhalation Anesthesia: Newer Developments."

Dr. Norman Fritz Miller, Professor of Obstetrics and Gynecology, University of Michigan Medical School, Ann Arbor, Michigan, read a paper entitled "Cesarean Section."

Dr. Louis Joseph Karnosh, Assistant Clinical Professor of Nervous Diseases, Western Reserve University School of Medicine, Cleveland, Ohio, read a paper entitled "Clinical Aspects of Frontal Lobe Disease."

There was no discussion of the above papers.

Thursday, October 10th, 9:00 a. m.

The second General Meeting convened at nine-thirty Thursday morning, Dr. Don Cameron of Fort Wayne, vice-chairman of the Section on Surgery, presiding.

Dr. Virgil S. Counseller, Assistant Professor of Surgery, University of Minnesota Graduate School of Medicine, Minneapolis-Rochester, Minnesota, and chief of a surgical section at the Mayo Clinic, Rochester, Minnesota, read a paper entitled "Some Changing Concepts Regarding the Endometrium and Their Significance."

Dr. Sanford R. Gifford, Professor of Ophthalmology, Northwestern University Medical School, Chicago, read a paper entitled "Problems of Senile Cataract."

Dr. Elexious Thompson Bell, Professor of Pathology, University of Minnesota Medical School, and University of Minnesota Graduate School of Medicine, Minneapolis-Rochester, Minnesota, read a paper entitled "Pathology of Tumors of the Breast."

Dr. William F. Braasch, Professor of Urology, University of Minnesota Graduate School of Medicine, Minneapolis-Rochester, Minnesota, read a paper entitled "Recent Advances in the Treatment of Infections Involving the Urinary Tract."

Dr. Louis George Herrmann, Assistant Professor of Surgery, University of Cincinnati College of Medicine, Cincinnati, Ohio, read a paper entitled "Passive Vascular Exercise Method of Treating the Obliterative Arterial Diseases of the Extremities."

Dr. Emmet F. Horine, Associate Clinical Professor of Medicine, University of Louisville School of Medicine, Louisville, Kentucky, read a paper entitled "Practical Management of Cardiovascular Emergencies."

There was no discussion of the above papers.

SECTION ON MEDICINE

Wednesday, October 9th, 2:00 p. m.

The Section on Medicine convened at two o'clock Wednesday afternoon, the Chairman, Dr. B. S. Cornell of Fort Wayne, presiding.

Dr. E. M. Van Buskirk, Fort Wayne, read a paper entitled "Benign Tumors of the Stomach." Discussed by Drs. H. J. Pierce, Terre Haute, and H. L. Murdock, Fort Wayne.

Dr. Fletcher Hall, Fort Wayne, read a paper entitled "Undertreatment versus Over-treatment of Syphilis." Discussed by Drs. F. M. Gastineau and F. W. Cregor, Indianapolis.

At this time the Chairman presented Dr. J. Tate Mason of Seattle, Washington, President-elect of the American Medical Association, and Dr. William F. Braasch of the Mayo Clinic.

DR. J. TATE MASON: Mr. Chairman and Gentlemen of the Section: I wish to thank you very much for the ovation you have given me. It gives me a great deal of pleasure because I know you do it, not to honor me so much as the great Association which I represent for a short time. I am very glad to be here, and I do not know that I have heard any papers in any State in the United States that compare in excellence with the papers I have heard here.

I know you have a full program, and this is not the time or place to say more than that I am glad to be here and I thank you from the bottom of my heart for your kindness.

DR. WILLIAM F. BRAASCH: As past-President of the Minnesota State Medical Association, and as assistant editor of *Minnesota Medicine*, and having had a keen interest in medical economics for several years, I would like to say that along that line Indiana is one of the best organized associations we have.

I am sure I shall receive much inspiration not only in meeting you but in learning many things that have been done by this organization. You will hear more from me tomorrow. I thank you.

In the absence of Dr. H. F. Beckman of Indianapolis, his paper on "Diabetes with Pregnancy" was read by Dr. Walter F. Kelly of Indianapolis. Discussed by Drs. Roscoe H. Beeson, Muncie, and B. M. Edlavitch, Fort Wayne.

Election of Section officers resulted as follows:

Chairman—A. S. Giordano, South Bend
Vice-Chairman—E. M. Van Buskirk, Fort Wayne
Secretary—Leon G. Zerfas, Indianapolis

Dr. Edwin F. Kiser, Indianapolis, read a paper entitled "The Senile Heart." Discussed by Drs. Herman M. Baker, Evansville, and Bayard G. Keeney, Shelbyville.

Dr. Larue D. Carter, Indianapolis, read a paper entitled "Encephalitis." Discussed by Dr. P. S. Johnston, Richmond.

Dr. L. A. Sandoz, South Bend, read a paper entitled "The Diagnosis and Treatment of the More Common Skin Diseases." Discussed by Drs. John E. Dalton, and Harold F. Dunlap, Indianapolis.

SECTION ON SURGERY

October 9, 1935

The Section on Surgery of the Indiana State Medical Association was called to order by the Chairman, Dr. Don Cameron, Fort Wayne, at 2:20 P. M.

The following scientific program was presented:

Dr. Stanley H. Skrentny, Hammond, presented a paper entitled "Appendicitis in Children." Discussed by Dr. Sater Nixon, Indianapolis, and in closing by the essayist.

Dr. Paul Beard, Indianapolis, presented a paper entitled "Conservative versus Radical Pelvic Surgery." Discussed by Dr. George A. Collett, Crawfordsville.

Dr. John W. Thomson, Garrett, presented a paper entitled "Non-Penetrating Injuries to the Abdominal Viscera." Discussed by Dr. W. H. Baker, South Bend.

Dr. J. Tate Mason, Seattle, President-elect, American Medical Association, gave a few words of greeting to the Section.

Dr. W. W. Hewins, Evansville, presented a paper entitled "Present Status of Prostatic Resection." Discussed by Drs. William F. Braasch, Rochester, Minn., Ernest O. Nay, Terre Haute, A. J. Sparks, Fort Wayne, and William N. Wishard, Indianapolis.

Dr. E. B. Mumford, Indianapolis, presented a paper entitled "The Semilunar Cartilage of the Knee." Discussed by Drs. Lyman T. Rawles, Fort Wayne, E. C. Davidson, Lafayette, and in closing by the essayist.

Dr. W. D. Gatch, Indianapolis, presented a paper entitled "Recognition and Treatment of Bowel Obstruction." Discussed by Drs. Will C. Moore, Muncie, and Don Cameron, Fort Wayne.

The following officers were elected for the coming year:

Chairman, Dr. Will C. Moore, Muncie.
Vice-Chairman, Dr. George Green, South Bend.
Secretary, Dr. Paul Beard, Indianapolis.

The meeting adjourned at 5:25 P. M.

SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

The Section on Ophthalmology and Otolaryngology convened at 2:40 p. m., October 9, in Room 303 of the Hotel Gary, Gary, with the chairman, Dr. B. J. Larkin, presiding.

The chairman expressed appreciation for his election to this office and said that he felt only one other office in the Association conferred greater honor. He credited the secretary, Dr. Calvert, with having arranged an excellent program.

The following papers were presented:

"Cataract Formation Following the Use of Dinitrophenol," by Howard E. Hill, M. D., Muncie. Discussed by C. W. Rutherford, M. D., Indianapolis; W. F. Hughes, M. D., Indianapolis; D. H. Row, M. D., Indianapolis; M. S. Harding, M. D., Indianapolis; Joel Whitaker, M. D., Indianapolis; and Dr. Hill, closing.

"Otitis Media," by J. V. Cassady, M. D., South Bend. Discussed by Russell Sage, M. D., Indianapolis; D. O. Kearby, M. D., Indianapolis; and Dr. Cassady, closing.

"Refractive Technic," by M. S. Harding, M. D., Indianapolis. Discussed by E. M. Shanklin, M. D., Hammond; E. O. Alvis, M. D., Indianapolis; Eugene L. Bulson, M. D., Fort Wayne; W. H. Miller, M. D., Terre Haute; B. D. Ravdin, M. D., Evansville; J. R. Frank, M. D., Valparaiso; Flavia Doty, M. D., Gary; C. W. Rutherford, M. D., Indianapolis; and M. S. Harding, closing.

"Study of the Pathology of the Tympanic Membrane," by B. D. Ravdin, M. D., Evansville. Discussed by C. H. McCaskey, M. D., Indianapolis, and Dr. Ravdin, closing.

C. P. Clark, M. D., of Indianapolis, scheduled to present a paper on "Pathology of the Eye," asked that presentation of the paper be postponed until a later date. Motion was made that Dr. Clark's suggestion be accepted and that his paper be placed first on the program for next year. Motion seconded and carried.

Section officers were elected as follows:

Chairman, E. E. Holland, M. D., Richmond.
Vice-Chairman, Howard E. Hill, M. D., Muncie.
Secretary (re-elected), Raymond Calvert, Lafayette.

The Section on Ophthalmology and Otolaryngology adjourned at 5:15 p. m.

SECTION ON ANESTHESIA

The Section on Anesthesia convened at 2:00 P. M., October 9, 1935, in Room 315, Hotel Gary, with the chairman, Dr. Romberger, presiding.

The Chairman read an excerpt from a letter from Dr. F. H. McMechan, of the International Anesthesia Research Society, as follows:

"In behalf of organized anesthesia, may we offer our congratulations and deepest appreciation to the Indiana State Medical Board for its move to restore anesthesia as an inviolable part of the practice of medicine; to the Indiana State Medical Association for its friendly cooperation in establishing a Section of Anesthesia; to the officers of the Section for their splendid efforts in arranging the initial meeting and program; to the speakers for their contributions to the progress of the specialty, and to all in attendance for their interest and sacrifices in attending."

The Chairman then read his address: "Organized Professional Anesthesia." Floyd T. Romberger, Lafayette.

A. L. Schwartz, Cincinnati, Ohio, read a paper on "Professional Anesthesia; A Hospital Plan in Operation Eighteen Years." This paper was discussed by K. C. McCarthy, Toledo, Ohio; A. M. Kirkpatrick, Columbus, Ind.; F. T. Romberger, Lafayette, Ind.; and in closing by A. L. Schwartz, Cincinnati, Ohio.

Lillian B. Mueller, Indianapolis, read a paper on "Avertin Anesthesia; A Review of 3,000 Cases." This paper was discussed by C. N. Combs, Terre Haute, Ind.; G. M. Rosenheimer, South Bend, Ind.; M. M. Piper, Rochester, Ind.; R. M. Kelsey, LaPorte, Ind.; C. H. McCaskey, Indianapolis, Ind.; and in closing by Lillian B. Mueller, Indianapolis.

Ralph M. Waters, Madison, Wisc., read a paper on "Teaching Value of Records." This paper was discussed by E. S. Sevensma, Grand Rapids, Mich., and in closing by Ralph M. Waters.

The Chairman asked Marie Kast-Kuhlman, of Oakland, California, formerly a member of the Society, to speak about conditions in that state so far as anesthesia is concerned.

For the ensuing year, the following officers were elected:

Chairman, Charles N. Combs, Terre Haute.
Secretary, Lillian B. Mueller, Indianapolis.
Vice-Chairman, G. M. Rosenheimer, South Bend.

Before declaring the meeting adjourned, the Chairman made the following address:

"I would like to pay a personal tribute to every doctor in the State of Indiana who is interested in anesthesia. I feel that we have accomplished a marvelous thing in the state. I see where we can become leaders in the field of anesthesia in the entire United States, and I feel that every state is watching us to see what we will do, particularly throughout the middle west. This room has an occupancy of fifty. For the greater part of the afternoon it has been completely filled and I am sure that at least seventy-five or eighty men have been here this afternoon. This afternoon's session is the first meeting of the first Section on Anesthesia east of the Rocky Mountains, and the interest it has aroused has made me very happy indeed. It is far ahead of my most optimistic expectations."

The Section adjourned at 4:40.

THE EXECUTIVE COMMITTE

THE INDIANA STATE MEDICAL ASSOCIATION IN ROOM 317, HOTEL GARY, GARY, INDIANA

October 7, 1935.

Roll call showed the following present: W. H. Kennedy, M. D.; H. H. Wheeler, M.D.; O. O. Alexander, M.D.; R. L. Sensenich, M.D.; E. M. Shanklin, M.D.; A. F. Weyerbacher, M.D., and T. A. Hendricks, executive secretary.

The monthly statements of receipts and expenditures and reports of the budget for the Association committees and THE JOURNAL for September were made.

Membership report:

Number of members on October 4, 1935	2742
Number of members on October 4, 1934	2670
Gain over last year	72
Number of members on December 31, 1934	2741

1935 Meeting at Gary:

(1) It was the opinion of the committee that the Henry county resolutions in regard to the socialization of medicine and high school debates upon that subject should be presented to the Council at its meeting on October 8 with the recommendation that these be tabled.

(2) Copies of suggestions for 1935-1936 by Dr. Sensenich distributed to members of the committee. These suggestions were to be considered by the House of Delegates.

(a) Spring graduate educational assembly at Indianapolis. The committee felt that the offer of the Indiana University School of Medicine to house the spring graduate educational assembly of the State Medical Association should be presented to the House of Delegates for its approval or rejection.

(3) Recodification of Constitution and By-Laws. This matter was discussed by the Executive Committee and will come up for action on the floor of the House of Delegates at the meeting on October 8.

(4) Arrangements were reviewed for proper memorial to Dr. Leach and program completed for Dr. Sensenich as president-elect to take the place of Dr. Leach as presiding officer at the general meetings, at the meetings of the House of Delegates, and at the annuel banquet.

(5) Announcement made that Dr. Olin West, secretary of the American Medical Association, Dr. R. G. Leland, director of the Bureau of Medical Economics of the A. M. A., and Dr. Harold Camp, secretary of the Illinois State Medical Society, would be present at the meeting.

(6) Invitation from Dr. Burton D. Myers asking the Association to hold its meeting in Bloomington next year brought to the attention of the committee. This, of course, was to come up for action by the House of Delegates, along with invitations from French Lick and South Bend, and any other cities.

Legislative and Legal Matters:

Social Security Bill.

(a) Position of liaison officer for Dr. Harvey's office is still open.

FERA and WPA:

(1) Charles Marshall, director of finance, Governor's Commission on Unemployment Relief, appeared before the committee and recommended that the Indiana State Medical Association appoint a committee to act in cooperation with a similar committee from the township trustees association and the Governor's Relief Commission to discuss fee schedules for township relief cases and other problems arising from the care of the indigent sick. The Executive Committee recommended that Mr. Marshall appear before the Council of the Association.

(2) *WPA Workers.* Mr. Marshall stated that the WPA worker, as far as relief is concerned, is to be looked upon just as any other person who draws the same wages in private industry as does the WPA worker from the federal government.

(3) Letters from Dr. Olin West in regard to medical services for WPA workers brought to the attention of the committee. WPA workers who are injured while on duty will come under the rulings of the United States Employees' Compensation Commission, and bills for medical services rendered should be submitted to the Commission.

(4) *The Kansas Medical Society plan* for the care of the indigent sick was brought to the attention of the committee. In short this plan would mean that $1.00 per individual per month upon relief should be set aside for payment of medical services. Copies of this plan are to be sent to members of the Executive Committee.

(5) *The Illinois State Medical Society plan* was brought to the attention of the committee. Copies of this plan also to be sent to members of the committee.

(6) *Discontinuance of direct federal relief* with article in JOURNAL calling attention to same brought to the attention of the committee.

The Journal:

(1) Letter received from Howard A. Carter, secretary of the Council on Physical Therapy of the American Medical Association, expressing appreciation for the notice received in THE JOURNAL, brought to the attention of the committee.

(2) The committee approved the purchase of the directory of the American Medical Association for Dr. Shanklin.

(3) The committee approved giving suitable free advertising space to the American Red Cross and the National Tuberculosis Association in the November and December issues of THE JOURNAL. Spaces for these advertisements have been granted every year for a number of years. One-quarter to one-half page is to be used as before.

(4) The committee disapproved the inclusion of dentists' cards among the paid professional announcements in THE JOURNAL. This is in accord with the policy established some time ago by the committee.

(5) The committee instructed the managing editor to cooperate in every way possible with the Indianapolis Better Business Bureau and approved the filling out of forms to be filed with the Bureau by the State JOURNAL.

(6) Report made of refund of $2.34 by Periodical Publishers Institute, code authority for the publishing industry, of the $10.00 dues paid last year.

(7) Arrangements for suitable memorial tribute to Dr. Leach on president's page of the November JOURNAL completed by the committee.

BUREAU OF PUBICITY

August 16, 1935.

Present: William N. Wishard, M.D., Chairman; J. H. Stygall, M.D.; E. D. Clark, M.D.; and T. A. Hendricks, executive secretary.

Release, "Preparation of Children for School," approved for publication in Monday papers, September 2.

Pamphlet entitled, "Information Regarding the Prevention of Contagious Diseases," for distribution by the State Fair Committee approved.

Preliminary draft of the report of the Bureau of Publicity presented to the Bureau. Suggestions, corrections, additions and comments to be made before preparation of final draft of report.

The Bureau authorized the following letter to be sent to the director of publicity of Indiana University in regard to the State Fair exhibit upon burns that is to be conducted by the University:

"Upon behalf of the Bureau of Publicity, we made a call at the Indiana University School of Medicine Wednesday afternoon and viewed the moving picture of the plastic surgery operation of a child's hand and the photographs of patients suffering from cancer and burns.

"We approved the plastic surgery picture which was shown us but we did not feel the pictures of victims suffering from cancer or burns were suitable for display for a general audience. We felt that these pictures were of undoubted scientific value and would be suitable for a pro-

fessional audience but we believe they are too revolting to show a popular audience.

"Upon behalf of the Bureau of Publicity we wish to thank you and the Indiana authorities for giving us the opportunity to express our opinion in this matter."

There being no further business the meeting was adjourned.

September 16, 1935.

Present: William N. Wishard, M.D., chairman; J. H. Stygall, M.D.; E. D. Clark, M.D.; and T. A. Hendricks, executive secretary.

The Bureau approved the preparation of the following releases on the state meeting at Gary, October 8, 9 and 10, 1935:

Saturday, September 28—General story.
Sunday, September 29—Program.
Wednesday, October 2—Entertainment.
Thursday, October 3—Special features, scientific and commercial exhibits.
Friday, October 4—Woman's Auxiliary.
Saturday, October 5—Golf and trap shoot story.
Wednesday afternoon, October 9—President's address.

The following requests for speakers were received by the Bureau:

September 10—Fayette-Franklin County Medical Society, Connersville, Ind. Speaker obtained to talk on obstetrics.

September 10—Knox County Medical Society, Vincennes, Ind. Speaker obtained.

September 10—Kiwanis Club, Cambridge City, Ind. Speaker requested by State Division of Public Health. Speaker obtained.

Report on Medical Meeting

August 22—Grant County Medical Society, Marion, Ind. "Some Newer Advances in Therapeutics." 20 present.

The final corrections were made and the secretary was instructed to prepare the final draft of the annual report of the Bureau of Publicity for publication in THE JOURNAL.

A copy of the pamphlet entitled, "Information Regarding the Prevention of Contagious Diseases," prepared by the Bureau of Publicity and distributed by the State Fair Committee at the State Fair brought to the attention of the Bureau.

The Bureau received a letter from the secretary of the Medical Society of the County of New York stating that there is no law in New York favoring the eight-hour day for nurses.

Letter received from the director of publicity of Indiana University, Bloomington, in regard to the exhibit of the Indiana University School of Medicine at the State Fair.

Several months ago the Bureau of Publicity received from the clipping bureau clippings of items regarding cases treated by certain physicians which appeared in an Indiana newspaper. The Bureau brought these clippings to the attention of the officers of the county medical society, the names of whose members were mentioned in these items. The Bureau has received the following letter from the secretary of the county society in question:

"At the last meeting of the Wabash County Medical Society a motion was voted and passed that the Society wishes to have no doctor's names mentioned in the paper in connection with a patient."

The secretary was instructed to write to the secretary of that society, voicing the appreciation of the Bureau for the action taken by the society concerning newspaper notices of doubtful ethical character. The Bureau feels that such methods are for the safety of the profession and the public health and urges all county medical societies to take similar action.

Health cartoons which appeared in an out-of-state paper brought to the attention of the Bureau. The Bureau instructed the secretary to write to the author of these cartoons advising him that the material had been read with interest.

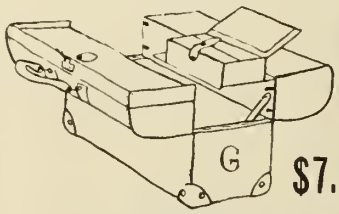
PROFESSIONAL PROTECTION

SINCE 1899 SPECIALIZED SERVICE

A DOCTOR SAYS—

"The case involved a broken needle in a minor, which happened seven years ago. Due to the length of time before suit, many of the details had been lost and my office assistant was now in another state. So, I am thankful for your cleaning up a difficult situation."

THE MEDICAL PROTECTIVE COMPANY
OF FORT WAYNE, INDIANA
WHEATON, ILLINOIS



Physicians' BAGS
$7.98 to $20
GAUSEPOHL TRUNKS
51 MONUMENT CIRCLE
Indianapolis

Important to Your Babies!

ACCEPTED AMERICAN MEDICAL ASSN. Committee on Foods



Larsen "Freshlike" Strained Vegetables are first quality garden fresh vegetables cooked, strained and sealed under vacuum to protect vitamins and mineral salts. For further protection we seal in special enamel lined cans.

All Varieties 10c Per Can

LARSEN'S "Freshlike" Strained Vegetables

THE LARSEN COMPANY, Green Bay, Wis.

---for Dependable UNIFORMITY



IN those cases of impaired cardiac efficiency where the digitalization of your patient is indicated, Digitol may be relied upon with confidence in the administration of digitalis. By laboratory test and by long clinical use, Digitol has clearly demonstrated its efficiency and reliability.

Digitol is standardized biologically by the U.S.P. method to a definite uniformity of potency. Digitol is uniform in action and contains therapeutically desirable constituents of the digitalis leaf, free of inert matter or precipitation.

Digitol-Mulford (Fat-Free Tincture of Digitalis) carries on the label the date of biological test. Digitol is offered only in one-ounce sealed amber bottles supplied with a specially designed, standardized dropper for ease and accuracy in administration.

PHARMACEUTICALS **Sharp & Dohme** BIOLOGICALS

Philadelphia *Baltimore*

"Quality First S & D *Since 1845"*

Digitol-Mulford

SOUTHERN MEDICAL ASSOCIATION

Twenty-Ninth Annual Meeting

ST. LOUIS, MO.
November 19-22

THE OUTSTANDING MEDICAL MEETING of the year—the Annual Meeting of the **Southern Medical Association** in St. Louis in mid November. In the nine general clinical sessions, the sixteen sections, the eight independent medical societies meeting conjointly, and the scientific and technical exhibits, every phase of medicine and surgery will be covered—**the last word in modern, practical, scientific medicine and surgery.** Addresses and papers by distinguished clinicians not only from the South, but from all over the United States, as well as from several foreign countries.

Regardless of what any physician may be interested in, regardless of how general or how limited be his interest, there will be at St. Louis a program to challenge that interest and make it worth while for him to attend.

MEMBERS OF THE INDIANA STATE MEDICAL ASSOCIATION (white), in good standing, are most cordially invited to attend the St. Louis meeting of the Southern Medical Association as visitors, with all privileges of members except voting in business session—all scientific and social activities are available to visitors. No registration fee. Program and identification certificate for reduced railroad rates are available upon request to the

SOUTHERN MEDICAL ASSOCIATION
Empire Building
BIRMINGHAM, ALABAMA

INDIANA STATE DIVISION OF PUBLIC HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report, September, 1935

Diseases	Sept. 1935	Aug. 1935	July 1935	Sept. 1934	Sept. 1933
Tuberculosis	130	250	177	108	125
Chicken pox	33	6	24	19	50
Measles	19	27	89	71	7
Scarlet fever	229	99	90	234	291
Smallpox	1	0	7	3	1
Typhoid fever	61	69	28	98	76
Whooping cough	123	138	146	134	84
Diphtheria	177	58	41	119	129
Influenza	93	124	48	69	139
Pneumonia	83	51	33	12	10
Mumps	17	10	33	3	7
Poliomyelitis	10	8	2	28	10
Meningitis	8	10	7	4	7
Malaria fever	5	12	8	2	5

COMMERCIAL ANNOUNCEMENTS

PRACTICE FOR SALE: Practice and equipment for sale by physician who has retired from private practice. Equipment includes complete line of waiting room, examining room, drug room, and laboratory equipment; stoves; examining tables; microscope (Bausch and Lomb); eye, ear, nose and throat treatment outfit; air compressor; desk; drugs; and practice. For all of this, price asked is $300, which is less than the value of the drugs alone. For inspection of the property, address Rev. Harry L. Walmsley, Uniondale, Indiana.

RETIRING PHYSICIAN wants to dispose of his practice because of ill health. Has practiced general medicine for thirty-eight years. For detailed information address Dr. J. D. Malott, Converse, Indiana.

PHYSICIAN who has been engaged in general practice desires to locate in larger city and is interested in working with a surgeon. Partnership considered. Address Box M-11, c/o THE JOURNAL, 1021 Hume Mansur Building, Indianapolis.

EXCELLENTLY QUALIFIED OALR man available January 1, 1936. Age 31. Married. Trained in peroral endoscopy and rhinoplasty. Graduate of class A school; twenty months otolaryngology. Splendid recommendations. Can do general work, but prefers ear, nose and throat. Address Box MWM-11, c/o THE JOURNAL, 1021 Hume Mansur Building, Indianapolis.

MORPHINE AND OTHER NARCOTIC ADDICTIONS —Institutional care and treatment of selected patients, who have responsibilities, wish to make good, and learn how to keep well. Methods easy, regular, humane. Twenty-eight years of experience. Dr. Weirick's Sanitarium, Elgin, Illinois.

TECHNICIAN wants position. X-ray, laboratory, and physiotherapy work. Ten years of experience. Desires position with physician, clinic, or hospital. Willing to supply his own equipment. Salary or commission basis. Write I. W., — THE JOURNAL, 1021 Hume Mansur Building, Indianapolis.

GOOD LOCATION: At Forest, Clinton County, Indiana, complete physician's office, with equipment and instruments, including drugs. No drug store in town. Office and rooms ready for man who will take the place of physician who died recently. For further information, address Mr. F. H. Suhre, 2445 North Pennsylvania St., Indianapolis, Indiana, or telephone Harrison 0469-W. Indianapolis.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

OFFICE OF PUBLICATION: 1021 Hume Mansur Bldg., INDIANAPOLIS, INDIANA

VOLUME 28 DECEMBER, 1935 No. 12

ORIGINAL ARTICLES

CESAREAN SECTION*

NORMAN F. MILLER, M. D.

ANN ARBOR, MICHIGAN

Cesarean section is subject to much repeated discussion and justly so, for in selecting this method of delivery keen obstetrical judgment and decisive action always must be exercised. Faulty judgment in its election or inadequate skill in its performance may render this valuable operation a death dealing performance. Unfortunately there exists a great deal of confusion concerning its proper place in the field of obstetrics. For this there are several reasons, not the least of which is a fundamental misconception concerning obstetric practice and the inability, therefore, properly to evaluate given obstetric situations. Reports appearing in our medical journals also contribute glaringly to this confusion. I propose to discuss these factors as I see them with the hope that cesarean section may achieve its rightful place as a happy solution to many obstetric problems, but by no means a substitute for normal labor.



NORMAN F. MILLER

Dreading repetition of certain complications, the physician often toys with thoughts of cesarean section. Buoyed by reports of series without a death, he finds himself in step with writers who plead for its more frequent use. But the delusion is short lived. From here and there come reports of excessive mortality. Comprehensive studies with carefully summarized conclusions inform him that there is "..... excessive use of cesarean section and as a result a great increase in the mortality,"[1] and also that "It will be a sad day for obstetrics and for the community if cesarean section is freely and light-heartedly employed in complications which can be successfully overcome by manipulations and devices long associated with the art of obstetrics."[2] And so, back and forth, up and down, the battle wages in the physician's mind. Never really clear as to its use and misuse, the perplexed physician remains in a quandary. Whom shall he believe, and to what extent shall he use it? Unfortunately the innocent patient is the recipient of hazards engendered by this confusion.

Uncritical Statistical Analysis: A significant reason for this confusion is to be found in reported mortality following cesarean section. The average person, and the physician is no exception, is impressed with any array of statistical figures. Thoughtlessly he accepts them as correct and their interpretation as valid. Either by direct statement or through implication, readers are led to believe that the cesarean operation is extremely hazardous, in proof whereof statistics are presented which actually portray the mortality from obstetrical complications and untimely operations, in addition to the mortality associated with the operation itself. Because of this, cesarean section has received much undeserved incrimination. I do not wish to be misunderstood. I am not advocating more frequent cesarean operation, but I do wish to see this extremely valuable means of delivery relieved of undeserved tarnish. There is little doubt that many ill-advised cesarean operations are being performed. Reports of death statistics often reveal the penalty of faulty judgment and untimely operation and should, therefore, be critically studied. Such statistics should be evaluated from several points of view, thus: (1) complication for which it was done; (2)

* Presented before the general meeting of the Indiana State Medical Association at the Gary session, October 9, 1935.

[1] Maternal Mortality and Morbidity, J. M. Munro Kerr, M. D., 1933. Wm. Wood and Co., Baltimore.

[2] Maternal Mortality in New York City, page 138. The Commonwealth Fund, 1933. New York, N. Y.

when it was performed (i. e., stage of labor); and (3) how well it was carried out. With a better understanding of statistics the physician is not only able to evaluate such reports, but quickly discovers that these same points must be carefully considered before selecting cesarean as a means of delivery for his patients. Uncritical analysis of operative results have contributed greatly to our present confusion, but improvement in this respect alone will not lead to more intelligent use of the operation. Certain other factors play an important part, particularly an unfortunate assumption, noted in medical practice everywhere.

Every Physician an Obstetrician? I refer to the view publicly believed and medically accepted that every physician is an obstetrician. Every physician is not an obstetrician, and of this the vagaries of the subject under discussion are ample proof, if proof is necessary. Perhaps the physician possesses good obstetric judgment but lacks the necessary training to permit his skillful performance of the operation. Under such circumstances no cesarean is performed when it might have been the most desirable method of delivery. Perhaps the physician possesses general surgical training but lacks obstetric judgment. This is commonly the situation with general surgeons. When the surgeon is lacking in obstetric judgment, the patient as a consequence suffers the even greater hazard engendered by the surgeon's false sense of security which comes from knowing how but not when the operation should be performed. Too frequently the surgeon finds cesarean section his one answer to obstetric riddles. The trained obstetrician, on the other hand, through postgraduate study or from the school of experience, has acquired that judgment and technical skill which is essential to competent obstetric practice. Since obstetrics often serves as a source for bread and butter, doctors are naturally reluctant to admit, much less strive for the correction of, this widespread misconception. Obstetrics is the oldest of all medical specialties. It is something that always has been, something which a century ago every physician had to do. But like all branches of medicine, obstetrics has progressed and today we find it a highly specialized field calling for the best skill and judgment the medical profession has to offer. Today the picture wears a different hue, but chiefly because the educated public has come to realize that every person is at one time under the obstetrician's care. Realization that confinement is an event of paramount importance in the lives of most women is seen in the fact that potential young mothers have taken up the cudgel and today recognize the need for, and demand better obstetric care. Interest in obstetrics is on a progressive upward swing due in a large part to this momentum of public opinion. Every physician who would practice obstetrics should adequately equip himself to meet properly the present day demands or else see that such care is provided for his patients with obstetric complications. Only by so doing can he properly discharge his responsibility to womanhood and future generations of mankind.

Prenatal Care: Like all good things which come in full measure, their benefits often go unrecognized. Having achieved prenatal care in good measure, we now see its value questioned. F. J. Browne[1] states that there can be no doubt that antenatal care has led to a great deal of unnecessary interference and meddlesome midwifery. Tyler, Watkins and Walker[3] in an interesting study on "The Evaluation of Prenatal Care," fail to find benefits ordinarily attributed to prenatal care. In spite of these reports the benefits of prenatal care are many and its value need not be questioned. It should be thoroughly understood, however, that no amount of prenatal care can ever be an adequate substitute for proper care at the time of confinement. The impossible must not be expected. By focusing attention on the many complications and hazards of pregnancy and labor, the inexperienced or poorly trained obstetrician when in doubt decides to play safe, and often chooses cesarean section as the easiest way out of his dilemma. One cannot, therefore, deny the correctness of Browne's assertion, but the fault lies not with prenatal care but with those whose judgment and interpretation are poor. These criticisms of prenatal care are arguments for better trained obstetricians and not against prenatal care. Identical situations may be seen in other specialties where deficient knowledge of the subject leads to faulty interpretations.

Indications for Cesarean Section: Most indications are relative and are, therefore, subject to certain qualifications and limitations. The mere fact that a prominent obstetrician prefers the cesarean operation for placenta previa does not mean that cesarean would be the treatment best suited for use in the treatment of that condition. Every indication must be weighed in the light of its contraindications and this, I believe, is one of the major weaknesses among physicians today. They are too easily swayed by opinions of others. Sound reasoning and logic ordinarily present disappear under the pressure of threatening catastrophy. But, assuming no lack of skill or facilities, knowledge of indications alone still does not permit making intelligent decisions regarding the use of the cesarean section. Knowledge of contraindications is also necessary and quite as important. It would, for example, be useless in a case of pelvic disproportion to lift the patient by cesarean operation from the hazards of prolonged labor due to the disproportion only to subject her to even greater dangers from an ill-timed operation. Similarly cesarean to save the baby, only

[3] Report on the Evaluation of Prenatal Care, by Drs. Tyler, Watkins, and Walker, Yale University School of Medicine. Published by the Institute of Human Relations, New Haven, Conn., 1934.

to lose the mother, shows a distorted idea of values and gross lack of sound judgment. In every instance of contemplated cesarean the indications should be weighed and balanced against the contraindications, and this unfortunately is not universally done.

Obstetrics, like other branches of medicine, is not an exact science; consequently, patients may derive maximum benefits from evaluation of the pros and cons of cesarean section only when weighed in the light of obstetric experience, and:

"Experience is by industry achieved."—Shakespeare.

Obstetric judgment is just as elusive, just as laboriously acquired, and just as necessary in making important obstetric decisions as surgical judgment is in surgery. Intangible as judgment may seem, life often depends upon it.

Giving complete lists of indications is impractical. Complications which under ordinary conditions would contraindicate cesarean, may under different circumstances indicate section to be the most desirable method of delivery. Speaking generally, however, the indications may be listed as follows:

I. ABSOLUTE.

Contraction or disproportion of the pelvis rendering birth through the normal passages absolutely impossible.

II. RELATIVE.

A. Questionable (loosely applied).

1. Slow labor.
2. Rigid cervix.
3. Unverified disproportion.
4. Eclampsia.
5. Mal-positions or faulty attitude of fetus.
6. Non-engagement of head.
7. Cardiacs.
8. Pulmonary TB.
9. Habitual death of fetus. (?)

III. MOSTLY JUSTIFIABLE.

1. Marked pelvic contraction.
2. Previous section.
3. Most placenta previas.
4. Most cases of abruptio placenta.
5. Certain rapidly progressing toxemias.
6. Obstructing tumors.
7. Rare cases of prolapsed cord with long, narrow, mostly undilated cervix.
8. Certain healed plastic operations on vagina, bladder and rectum. (Fistulas. Certain very extensive tears with cicatrix formation).
9. Other unusual cases.

Contraindictions. Like the indications, most contraindications are relative. Death of the patient following operation in the presence of certain contraindications probably but not necessarily indicates the operation to have been ill-advised. Yet the complication for which the operation was done may have rendered the prognosis poor regardless of delivery method. Similarly, survival of the patient in spite of serious contraindications does not invalidate the contraindication. Fate frequently sides with the doctor and his patient and one such occurrence should not blind us to facts well established by costly experience. Likewise, contraindications mean little unless weighed in the light of the indications. Both indications and contraindications are elastic—but in the light of obstetric experience they become measurable and it is this ability to weigh the pros and cons which is so essential in obstetric practice.

A. CONTRAINDICATIONS.

I. ABSOLUTE.

a. Dead baby, long labor with infection.

II. RELATIVE.

a. Most cases where efforts at delivery from below have been carried out.

b. Prolonged labor with long rupture of membranes.

c. Mild disproportions between head and pelvis.

d. Most cases with inadequate contractions (false pains?)

e. Rigid cervix (most cases).

f. Most "cardiac" patients.

g. Mild (incomplete) abruptio placenta during labor.

h. Marginal placenta previa at term, patient in labor.

i. Most fetal monstrosities.

It is highly desirable but practically impossible in the brief space of this paper to consider each indication and contraindication in detail. Yet this is so important that every physician should find time to inventory his own knowledge concerning these points.

Choice of Operation: Mortality statistics following the classical and low types of cesarean operation are seldom satisfactory for comparison. It is generally stated that mortality is twice as great following the classic operation. Certainly the low operation is fundamentally a sounder surgical procedure and should, therefore, give better results.

Because of this, every physician who proposes to serve his obstetric patients best must see to it that there exists no limitation in choice of operation should the need for cesarean arise. This does not mean that the classical procedure need be discarded. In clean elective sections it gives satis-

factory results and may on occasion be preferred. (I prefer this type for placenta previa—many men do not.) Regardless of type selected the significant point to remember is that early operation always presents a better prognosis. Nor should we be deceived by implications concerning the innocuousness of the low operation. It is quite as much an intra-abdominal procedure as the classical. But because of lower uterine incision and better peritonealization the low operation should always be favored unless the complication calls for the more quickly performed classic method. (Placenta previa, partial rupture of the uterus, shock, etc.)

Hysterectomy following cesarean should be reserved for selected cases of frank infection with no other means of delivery possible and for cases complicated by uterine tumors.

The true (?) extra peritoneal cesarean is so seldom needed that no attempt will here be made to discuss its qualities, good and bad.

CONCLUSIONS

In closing, certain fundamental points should be emphasized. At the risk of being dogmatic, I shall attempt some axioms which may be found helpful:

1. Cesarean section is one of the most useful methods of preventing and overcoming certain serious complications of pregnancy and labor.
2. The ideal is the premeditated or elective cesarean.
3. The low type of operation is fundamentally a sounder surgical procedure.
4. Technical skill without judgment or judgment without skill, one without the other is not sufficient if the patient is to be served best.
5. Don't wait too long before verifying suspected abnormality during labor.
6. Become thoroughly familiar with both the indications and contraindications. Always balance one group against the other before deciding upon section.
7. Cesarean, regardless of type used, is unwise in long drawn out, obviously infected cases, where attempts at delivery from below have been made.
8. In these neglected, cases remember that a living mother and a dead child is better than a dead mother and a living motherless child.

THE PRACTICAL MANAGEMENT OF CARDIO-VASCULAR EMERGENCIES*

EMMET F. HORINE, M. D.
LOUISVILLE, KY.

This article will deal with the practical treatment of such cardio-vascular conditions as are apparently dangerous and of sudden onset. Some of these emergencies are wholly reflex in origin while others arise within the heart itself; some though ostensibly serious actually involve no real danger, while others may cause either instantaneous death or a fatal termination within a few hours unless proper treatment is instituted. The importance of distinguishing immediately between the harmless and the possibly fatal emergency will necessitate a brief consideration of differential diagnosis.



EMMET F. HORINE

SYNCOPE

Fainting is the most frequent emergency for which the physician is called. When the various causes for the acute cerebral anemia which provokes the syncope are tabulated, it will be at once evident how necessary it is to arrive at a quick diagnosis for the purpose of applying appropriate and often life saving treatment. For the purpose of study the etiology of cardio-vascular syncope may be conveniently classified under two headings: (a) extrinsic; (b) intrinsic. However, in certain instances, there may be a combination of both factors.

The extrinsic cardiac causes for sudden loss of consciousness are:

1. The vaso-vagal reflexes;
2. Hyperactivity of the carotid sinus reflex;
3. Vagovagal reflex;
4. Postural hypotension;
5. Severe anemia from any cause;
6. Marked loss of blood;
7. Cerebral arterial or arteriolar sclerosis.

The intrinsic cardiac factors are as follows:

1. Heart block: (a) Permanent complete with Adams-Stokes seizures due to either standstill of the ventricles or to ventricular fibrillation; (b) Transient complete block with Adams-Stokes syndrome during the period of the complete block.

2. Initiation of an abnormal cardiac rhythm as follows:

(a) Auricular flutter;
(b) Auricular fibrillation;
(c) Paroxysmal tachycardia;

* Read before the general meeting of the Indiana State Medical Association at the Gary session, October 10, 1935.

(d) Ventricular fibrillation;

(e) Occasionally in frequent premature contractions or with transitory bigeminal rhythm.

3. Associated with aortic stenosis.[1,2]

SYNCOPE FROM EXTRINSIC CARDIAC FACTORS

In examining a person who has fainted, the diagnosis of the cause is sometimes established by listening to the heart. If the cardiac sounds are clear, or even though a murmur be present, if the rhythm shows an alternate slowing and quickening with apparent relationship to respiration, the condition is harmless since it is a common faint or vasovagal syncope as Lewis[3] terms it. These attacks rarely occur with the patient in the recumbent posture and there is usually a gradual loss of consciousness which permits him to lie down deliberately or slowly slip down. If witnesses of the attack state that it occurred upon the assumption of an upright position and if the heart is slow and regular with a very low and variable blood pressure the cause for the syncope is a postural hypotension. Another differential point between vasovagal fainting and postural hypotension syncope is that profuse sweating is an almost constant accompaniment of the former whereas adhidrosis is the rule in the latter.

One of the most interesting contributions to physiology during the past decade has been Hering's[4] discovery of the function of the carotid sinus. The function of the sinus is not constant for all species of animals and its function in man has not been as yet fully clarified. However, pressure on the carotid sinus in man will produce certain effects which are rather variable in degree depending on the activity of the sinus and upon the condition of the cardiovascular system. Patients with arteriosclerosis or with hypertension ordinarily exhibit a fall in blood pressure with a temporary slowing of the heart following stimulation of the sinus whereas normal controls show little if any reduction. Hyperactivity of carotid sinus reflex may induce fainting as a result of unusual intracardiac disturbances such as asystole, frequent premature contractions and varying degrees of heart block even though the myocardium is normal. Soma Weiss, Ferris and Capps[5] have recently described a vagovagal reflex which may produce disturbances similar to those just mentioned. Clinical differentiation between a carotid sinus syncope and a vagovagal one is rarely possible without considerable study unless seizures are uniformly induced by pressure on the carotid sinus, thus establishing clearly its hyperactivity.

The history of preceding long continued illness with anemia or of recent severe hemorrhage will clarify fainting from these causes. With vestibular involvement there is described a typical sense of rotation which serves to differentiate it from giddiness and fainting from other causes. Fainting due to intra-cranial lesions of various types will require far more in the way of thorough study, laboratory and instrumental aid than is possible during an emergency examination. Fortunately the first aid treatment of syncope due to extra-cardiac factors is largely the same, consisting in placing the patient in a comfortable supine position, seeing that the relaxed tongue does not obstruct breathing and loosening the clothing especially about the neck and waist. Breathing may be facilitated by lifting the lower jaw, turning the head to one side and inserting some type of air way. And I may add that an emergency satchel is not completely equipped unless it contains either a Hewitt, Connell, Lombard or other satisfactory type of air way. Full doses of atropine (e.g. 1/50 grain subcutaneously for an average adult) will relieve sweating and increase the heart rate. The intramuscular injection of 10 minims of a 1-1000 epinephrin solution is of value.

The persons most subject to vasovagal attacks are below par physically, lead sedentary lives, often are confined indoors at work for many hours or possibly are convalescent from some recent illness. The frequency of the attacks may be decreased or they may be prevented if the physical strength of the patient is built up by graduated outdoor exercise. Any tendency to anemia should be overcome and foci of infection should be sought for and removed.

No general rules can be given for the preventive treatment of carotid sinus or vagovagal attacks because of the varied lesions concerned in their initiation. Each patient requires careful study and, at times, repeated electrocardiographic examinations. Postural hypotension may be treated successfully by a ration of ephedrine as first advised by Ghrist and Brown.[6]

SYNCOPE FROM INTRINSIC CARDIAC CAUSES

In heart block a syncopal attack (Adams-Stokes seizure) may occur as a result of either marked slowing and possibly standstill of the ventricles or to transient ventricular fibrillation. Definite differentiation between these mechanisms requires electrocardiographic observations which are seldom possible. Clinically in ventricular fibrillation

[1] Gravier, L., Jr. de méd. de Lyon XV:631-634, September 20, 1934.

[2] Marvin, H. M., and Sullivan, Arthur G.: Clinical Observations upon Syncope and Sudden Death in Relation to Aortic Stenosis. *American Heart Jour.* X:705-735, August, 1935.

[3] Lewis, Sir Thomas: A Lecture on Vasovagal Syncope and Carotid Sinus Mechanism, with Comments on Gower's and Nothnagel's Syndrome. *British Med. Jour.* I:873-876, May 14, 1932.

[4] Hering, H. E.: Die Karotissinusreflexe auf Herz und Gefaesse, Dresden und Leipzig, Theodor Steinkopff, 1927.

[5] Weiss, Soma; Ferris, Eugene B.; and Capps, Richard B.: The Influence of Reflexes in the Induction of Intracardiac Disturbances. *Trans. Assn. of Amer. Phys.* XLIX:177-185, 1934.

[6] Ghrist, David G., and Brown, George E.: Postural Hypotension with Syncope: Its Successful Treatment with Ephedrine. *Amer. Jour. Med. Sci.* 175:336-349, March, 1928.

Schwartz[7] has observed an increase in the usual ventricular rate prior to a period of unconsciousness and suggests that transient ventricular fibrillation may be suspected when cardiac acceleration precedes the syncope. Slowing of the already slow ventricular rate in complete block possibly precedes a syncopal attack due to ventricular standstill. Epinephrin solution given as an intracardiac injection might be of value in ventricular standstill but such an injection would probably maintain a ventricular fibrillation and cause death. Hence a patient with an Adams-Stokes seizure must not be given epinephrin unless one is reasonably certain of the exact mechanism present. In the prevention of Adams-Stokes seizures barium chloride, in a dosage of one-third of a grain three times daily, will often completely abolish the attacks. Ephedrine, grain one-third, has also been reported to be effective.

It has been said by French[8] that "apart from cases of heart block, organic heart fainting occurs once only—the fatal syncope." This has not been my experience because I have observed many instances of fainting resulting from ventricular fibrillation, the sudden onset of auricular flutter or fibrillation and, after a variable interval of unconsciousness, recovery. Two case reports will suffice to illustrate the type of patient in which syncope in organic heart disease may occur.

Case 1. A female, aged sixty-nine, with hypertensive cardio-vascular disease of several years duration was seen hurriedly in consultation with Dr. Oscar E. Block of Louisville. She presented the picture of a severe acute pulmonary edema. A subcutaneous injection of morphine sulphate, grain one-fourth, and atropine sulphate, grain one-fiftieth, was immediately given. Her heart rhythm was regular with a rate of 116 and the blood pressure was 164 114 mm. Hg. Marked improvement followed the morphine and atropine. After forty-five minutes she expressed herself as being quite comfortable. A few minutes later while I was taking the pulse, I could no longer feel it. Coincidentally with the disappearance of the pulse the lower jaw dropped, the facial expression changed to that of death, unconsciousness ensued and respiration ceased. No heart sounds were then audible. After approximately a minute and a half heart sounds became audible, at first irregular, but soon regular at 100. Respiration began and within three minutes she was entirely conscious and talking without apparently realizing anything unusual had occurred. The blood pressure was 152 110 mm. Hg. No other attacks of ventricular fibrillation occurred and she slowly improved though she was kept in bed for a full month before being permitted to sit up for short periods. Her condition continued satisfactory for months when she developed an increasing, uncontrollable degree of congestive heart failure and succumbed to a terminal broncho-pneumonia.

Case 2. A female, aged forty, gave an eight year history of almost weekly attacks of fainting accompanied occasionally by convulsive seizures. A diagnosis of epilepsy had been made by her former physician. Questioning revealed that undue exertion seemed to predispose her to an attack. On several occasions she had experienced abdominal pain accompanied by marked pallor of the face just prior to loss of consciousness. Physical examination furnished conclusive evidence of a mitral stenosis. A few days later I was hurriedly called and reached her just as she was regaining consciousness. Her heart rhythm was apparently regular with a rate so rapid that it could not be accurately counted. Before electrocardiograms could be made the heart rate dropped to 104. A diagnosis of rheumatic mitral stenosis with paroxysmal auricular flutter as the cause for her syncopal attacks was made. She was placed on a daily ration of fifteen grains of quinidine sulphate with the result that the attacks ceased.

Some patients with paroxysmal auricular fibrillation or flutter experience repeated attacks without more discomfort than a fluttering sensation in the chest and only an occasional patient will have a fainting attack. It would seem that some additional mechanism, possibly temporary hyperactivity of the carotid sinus or other reflex, is caused by the onset of the abnormal rhythm and syncope ensues. Further the unconscious period is variable, and the abnormal rhythm often persists after consciousness is regained.

Paroxysmal tachycardia, multiple premature contractions and a bigeminal rhythm only occasionally produce fainting. Very firm pressure sustained for twenty seconds over either carotid artery below the angle of the jaw will frequently terminate an attack of paroxysmal tachycardia. These abnormal rhythms may be prevented by a daily dosage of from nine to twenty or more grains of quinidine sulphate.

The loss of consciousness which accompanies ventricular fibrillation is readily understood since, with this rhythm, no effective ventricular contractions occur and a profound cerebral anemia is instantly established. Death is inevitable if the ventricles fail to begin to contract within approximately six or seven minutes. There is no known preventive of ventricular fibrillation nor has any type of treatment proved of any value. The employment of epinephrin is apt to be fatal and

[7] Schwartz, Sidney P.: Transient Ventricular Fibrillation. *Arch. Internal Med.* XLIX:282-302, February, 1932.

[8] French, Herbert: An Index of Differential Diagnosis, 4th Ed., New York, Wm. Wood & Co., 1928, page 296.

NOTE: Since this paper was written, Borg (Central Society for Clinical Research, Eighth Annual Meeting, Chicago, November 1 and 2, 1935), has reported a case of complete heart block in which ventricular standstill was preceded by varying types of arrhythmia. Therefore, the clinical differentiation between ventricular fibrillation and ventricular standstill in Adams-Stokes seizures appears doubtful.

quinidin is contra-indicated. Some patients experience many hundreds of attacks while for others a single attack may prove fatal.

Syncope and even sudden death may occasionally occur in patients with aortic stenosis. An entirely satisfactory explanation for these occurrences has not been given though some believe them due to temporary inability of the left ventricle to eject sufficient blood through the narrowed orifice while others have suggested some type of hyperactive reflex or even ventricular fibrillation. This last hypothesis seems the most plausible though unfortunately it is the one for which nothing can be done.

PAROXYSMAL DYSPNOEA

Attacks of paroxysmal dyspnoea occur with startling suddenness and occasionally exhibit such an asthmatic type of respiration that it was quite natural for Hope[9] to describe the condition as "cardiac asthma." If the *cardiac* basis for the attack is fully recognized then the continued employment of the term "cardiac asthma" is open to less criticism than it would be otherwise. Some patients with paroxysmal dyspnoea present few or even no moist rales at the lung bases, while others have so many rales from base to apex that the term "acute pulmonary edema" is employed. It is inadvisable arbitrarily to regard these acute pulmonary manifestations as different clinical entities as some authorities do. The common basis for paroxysmal dyspnoea in its varied forms is acute *left ventricular failure ("defeat")* of greater or lesser degree. When regarded as such, proper treatment immediately suggests itself.

Morphine sulphate in full dosage in consideration of the weight, strength, age, sex and severity of the attack should be given intramuscularly. In the more severe attacks, when marked relief has not been obtained within forty-five minutes, half the primary dose should be given intravenously. I am convinced that morphine given intravenously under such circumstances is without danger and may even save the life of the patient. Should pulmonary edema be manifest, at least one-fiftieth grain of atropine sulphate should be administered with the first dose of morphine.

After the morphine has been given certain other procedures may be employed with additional benefit. Blood pressure cuffs as suggested by Danzer[10] may be applied to each of the four extremities with tubing and proper connections to a single manometer and the pressure raised to between 60 and 80 mm. Hg. The purpose of this procedure is thereby to trap blood in the extremities and thus diminish pulmonary congestion. In lieu of blood pressure cuffs tourniquets of rubber tubing or merely tightly applied gauze or muslin bandages may be applied.

Venesection may prove a life-saving measure under certain circumstances. If the above mentioned procedures are ineffectual and especially if the patient is plethoric and has hypertension, from 300 to 600 cc. of blood should be withdrawn.

Where practicable the patient may be placed in an oxygen tent or chamber. Also oxygen may be given with a closed inhaler. It would seem almost unnecessary to suggest that oxygen given by means of a funnel over the face or even by an intrapharyngeal catheter is entirely inadequate, as pointed out by Davies and Gilchrist[11] more than ten years ago.

Patients of this type are usually receiving digitalis and it should be continued in a maintenance dosage. When attacks of paroxysmal dyspnoea recur frequently, the daily administration intravenously of 100 cc. of a fifty per cent glucose solution may prove beneficial. Diuretics are of value and especially a combination of a mercury compound and theophylline, even though congestive failure is not manifest. It is well to place these patients on a high protein diet, but no added sodium chloride is to be allowed. The attacks may be, at times, prevented by absolutely prohibiting the ingestion of any liquid whatever from noon until the following morning.

With paroxysmal cardiac dyspnoea and signs resembling true asthma, one is prone to think of epinephrine as a remedy and it is actually recommended by some. However, since this condition is cardiac in origin, the result of left ventricular failure, epinephrine is not only contra-indicated, but it may be actually harmful. Furthermore, when we realize that experimentally in the pharmocologic laboratory epinephrine will actually produce pulmonary edema, the danger involved in its administration becomes apparent.

PSYCHOSIS

Patients with moderate to severe grades of heart failure occasionally manifest delirium to such a degree that they become difficult to manage. Neither sedatives nor hypnotics, even in large doses, will entirely control the condition. Ammonium chloride in a daily oral dosage of sixty to ninety grains and two cc. of mercupurin given intravenously each day will often control the psychotic state.

ANGINA PECTORIS

The typical attack of angina pectoris as described by Heberden is readily recognized but so many atypical types occur that the physician must be constantly alert if he is to recognize them. An

[9] Hope, J.: A Treatise on Diseases of the Heart and Great Vessels. London, William Kidd, 1832.

[10] Danzer, C. S.: Pathogenesis and Treatment of Dyspnoea in the Light of Recent Experiments. *Ann. Int. Med.* II:239, 1928.

[11] Davies, H. Whitridge, and Gilchrist, A. R.: Oxygen Therapy: Indications, Principles, and Methods. *Edinburgh Med. Jour.* XXXII:225-244, May, 1925.

excellent rule to follow is that any type of discomfort, whether oppressive, burning, tingling, severely painful or only enough so barely to register itself, radiating or not, which is located anywhere above the umbilicus up to the upper jaw, in the arms or hands, and which is uniformly provoked by exercise but relieved by rest or the administration of the nitrites is angina pectoris. Patients with this condition are instructed upon the onset of the symptoms to cease any exercise, sit or lie down if possible, and dissolve sublingually a hypodermic tablet of nitroglycerine, grain 1/100. A second tablet is to be taken in ten minutes and if relief is not secured after this one, a physician is to be called, inasmuch as there is now to be considered the possibility of a coronary thrombosis. Amyl nitrite may be used instead of nitroglycerine, though the latter is more easily and satisfactorily employed.

In preventing attacks of angina pectoris, sedatives, the xanthine derivatives, alcohol and bromide mixtures may be of value. When frequent attacks of angina are experienced with slight effort or at rest and despite the medication mentioned above, a coronary thrombosis is imminent. Under such circumstances these patients should be placed absolutely at rest in bed for four weeks and often not only is the threatened coronary thrombosis averted but the anginal syndrome is temporarily abolished. Patients with diabetes mellitus who are receiving insulin experience an anginal syndrome when the blood sugar is lowered to a hypoglycemic or even, at times, to a normal level.

CORONARY THROMBOSIS

Of intense and persistent pain suffered by human beings that of coronary thrombosis is the most excruciating. Yet in contrast unmistakable cases of coronary thrombosis occur in which no pain is experienced. Embolic phenomena involving arteries of the systemic circulation in a person who does not have rheumatic heart disease or an active endocarditis strongly suggests a coronary thrombosis. More or less shock, a fall in blood pressure, fever, a leukocytosis, a pericardial friction rub, a haematuria and certain electrocardiographic signs round out the perfect picture.

Morphine sulphate in adequate dosage and given intravenously, if necessary, is the emergency remedy for a patient suffering from the painful type of coronary thrombosis. Those patients showing any shock or embarrassment of respiration will be benefited by being placed in an oxygen tent or chamber. The presence of coronary thrombosis necessitates the daily administration of nine to fifteen or more grains of quinidine sulphate for the purpose of preventing frequent premature contractions or auricular fibrillation. Digitalis is not used unless congestive heart failure is present and then only a maintenance dose is employed. Sedatives and hypnotics are often required such as codeine, one of the carbamides or paraldehyde, but the drugs of the barbituric group are distinctly contraindicated because of their depressing and blood pressure lowering effects. If vomiting occurs the intravenous use of 50 to 100 cc. of a fifty per cent glucose solution once or twice daily is quite effective. Patients with coronary thrombosis should be kept absolutely at rest in bed for a minimum period of four weeks, dating from the last attack of pain. A relatively low calorie diet is indicated.

The following case report is one illustrative of the painless type of coronary occlusion.

A female, aged fifty-eight, with hypertensive cardio-vascular disease and electrocardiographic evidence suggesting widespread myocardial changes (left bundle branch block) had been under observation for fourteen months. The systolic blood pressure ranged from 180 to 200, while the diastolic was between 110 and 125 mm. Hg. A gross degree of congestive failure, present when she was first seen, responded readily to a maintenance dose of digitalis and diuretics. One evening she began to feel weak and shortly thereafter was conscious of a tight sensation in the right upper quadrant of the abdomen. Within a few hours the discomfort in the right half of the abdomen increased. I saw her the following morning and found a markedly enlarged and exquisitely sensitive liver with the lower border six cm. below the right costal margin. The heart sounds were faint, the blood pressure was 122/76 mm. Hg., the temperature was 100.6 and the leukocytes numbered 18,900 per c.mm. At no time did she complain of any chest pain. With such sudden development of passive congestion of the liver suggesting right-sided heart failure and with the marked fall in blood pressure in a known hypertensive accompanied by fever and leukocytosis, I felt justified in making a diagnosis of coronary thrombosis involving a branch of the right coronary artery. With absolute rest in bed, a reduced diet and diuretics, the liver receded in size until it was at the costal margin in two weeks. The blood pressure was then 144/92 mm. Hg. and has continued approximately at this level up to the present time, which is four weeks since her attack.

CONCLUSION

One may conclude from this study of cardiovascular emergencies that an immediate and correct diagnosis is imperative. In making such a diagnosis and applying proper treatment it is essential that one keep in mind the pathologic-physiology concerned.

CORRECTION

In Dr. E. M. VanBuskirk's article, pages 592 to 594 in the November issue of THE JOURNAL, illustrations numbered four and six were reversed in their order.

PROBLEMS OF SENILE CATARACT*

SANFORD R. GIFFORD, M. D.
CHICAGO

In proportion to its weight, the crystalline lens is one of the most important little lumps of tissue in the body. Its life history is a most fascinating one, and what I have to say about senile cataract will be more clear if I remind you of a few salient points about it. As you know, the lens arises from the surface ectoderm which becomes invaginated into the optic vesicle and develops there, separated, about the time of birth, from any blood supply and nourished by imbibition from the intraocular fluids. Its anterior cells develop to form the capsular epithelium while behind the equator the cells elongate to form the lens fibres. These fill the lens vesicle, while further cells are formed near the equator and are superimposed on the original cells which form the embryonal nucleus. New fibres are laid down on older fibres much like the layers of an onion. The object of this growth is to form a homogeneous mass of higher refractive index than the intra-ocular fluids which will focus rays of light on the retina while remaining perfectly transparent. This object is never perfectly achieved, however, and in every normal lens the suture lines where the ends of the fibres join, the insertion of the hyaloid artery and certain other landmarks are visible under proper conditions. By means of the slit-lamp and corneal microscope we may observe the lens in a perfect optical section, noting various zones, each of which corresponds to a known period in development of the lens. Certain exaggerations of the normal optical defects just described are very frequent and may reach proportions which interfere with vision to a greater or less extent. To call these by the name of cataract is technically correct but clinically very misleading to the patient, as they are not progressive and very few of them ever require surgical interference. One of the greatest advances in diagnosis is the ability to examine these congenital opacities with the slit-lamp and to distinguish them from early stages of progressive senile cataract. These findings are of no less importance in the examination of persons claiming visual disability after injuries.



SANFORD R. GIFFORD

The development of the lens does not stop with birth but goes on in the normal lens throughout life. The approximate date of any injury, malnutrition or toxic lesion of the lens may be estimated by the thickness of clear lens material which is laid down over the opacity formed. The nuclei of the mature fibres disappear and the deeper layers thus grow to be further and further from their source of nutrition, the aqueous humour. The original nucleus of the lens may thus be said to commence digging its own grave at the time of birth or even sooner. It becomes harder than the rest of the lens and has an increased refractive index, which accounts for the development of myopia in so many elderly persons, the phenomenon commonly referred to as "second sight." This is the form of cataract known as nuclear sclerosis, which may be considered a normal phenomenon of senescence. It takes place without any essential change in the chemistry of the lens which continues as does the normal lens to gain in weight by an increase in its solid constituents and a loss of water. Some degree of nuclear sclerosis is present in the lenses of every elderly person and there are only imperceptible gradations between this condition and the more marked degrees which interfere with vision and are called nuclear cataract. These stages come on, as does grey hair, much earlier in certain persons than in others and there is a definite tendency in certain families to develop them at an early age, as early as the age of forty when no other signs of senility are present. It may be seen how futile it is to attempt any form of treatment in this type of cataract. We know nothing with certainty as to the factors which influence this process. Use of the eyes probably has nothing to do with it and it is inflicting needless inconvenience on a patient to limit the use of his eyes on account of this condition.

The process is an exceedingly slow one and many persons affected by it are able to carry on their normal activities until they die without resort to surgery. Frequent changes of glasses are often necessary, due to increase in lenticular myopia and astigmatism. Selection of the most useful lenses for such patients requires much skill and time and this is the most useful service the ophthalmologist can perform in many cases. Maturity, in the ordinary sense of the word, never occurs in this type of cataract, but surgery is possible at any time and should be advised as soon as the patient's normal activities are interfered with by loss of vision which glasses will not correct.

There is another form of senile cataract in which conditions are slightly different. In this type, called cortical cataract, opacities develop in the lens fibres beneath the capsule. This is due to premature death of fibres in the actively growing zone of the lens. This process is accompanied by definite changes in the lens chemistry. The solid constituents are lost, especially certain important proteins and other substances necessary to the metabolism of the lens, while water is absorbed to take their place. The cortex becomes soft and finally the whole lens may be reduced to a milky fluid contained in the lens capsule. Even this may be absorbed and the pupillary space become

* From the Department of Ophthalmology, Northwestern University Medical School, Chicago, Ill. Presented before the general meeting of the Indiana State Medical Association at the Gary session, October 9, 1935.

clear again, which probably accounts for certain supposedly miraculous cures of cataract. Such an event is exceedingly rare, however, and is usually accompanied by complications which involve irreparable damage to the deeper ocular structures.

It may be supposed that the changes of cortical cataracts are due to some toxic process or nutritional disturbance which does not affect normal persons. The process resembles in many ways that which occurs in forms of cataract known to be of toxic origin. Cataract following removal of the parathyroids and the type which we are just learning is due to dinitrophenol are cortical in type, the principal difference from senile cataract being that they progress much more rapidly, the whole lens sometimes becoming opaque within two to three months.

It may be said parenthetically that, so far as we know, dinitrophenol does not affect any other portion of the eye except the lens and that results from operation are as good as in other forms of cataract. My one operated case has vision of 20/20 in both eyes. I have already seen two cases of cataract undoubtedly due to dinitrophenol and two others in all probability due to it. Undoubtedly many more cases will be seen, as opacities have occurred three months after the drug was stopped, and in persons who showed no other toxic effects. Hence, we have no danger signal to warn against its use and one's present reaction is that if any person wishes to lose weight badly enough to take this drug, he or, as is usually the case, she, should take it at her own risk with full understanding that this exceedingly inconvenient complication may develop.

The trouble with the theory that cortical cataract is due to toxic or nutritional factors is that such factors have not been discovered with any uniformity in persons with senile cataract. Cortical opacities, while not universal like nuclear sclerosis, are very common, increasing in frequency with age until at the age of 80 they are present in about 80% of persons. Certain families are predisposed and it has been supposed that an inherited defect in the germ plasm determines the death of the lens fibres at a certain age. Recent work, to which Bellows in our clinic has contributed, has shown that vitamin C is absent from the completely cataractous lens, while it is present in large amounts in the normal lens and aqueous and plays an active part in the lens metabolism. Experimental cataracts have been produced in animals by diets poor in vitamin G. Such findings are suggestive but it cannot be said as yet that lack of either of these vitamins is the cause of cortical cataract. Certainly the letter of Josephson in a recent number of *Science* on the use of vitamin C as a cure for cataract is exceedingly misleading. His data is vague and without any evidence in the way of drawings or photographs to support it. His results are absolutely contradictory to unpublished observations of Bellows, who in a series of cases given concentrated vitamin C saw no effect whatever on the opacities.

The same lack of positive evidence is observed with every other form of non-surgical treatment which has been claimed to clear lens opacities. One which has been widely publicized is the lens-antigen treatment of Davis. This treatment was based on erroneous theoretical considerations and Ellis in a large series of cases failed to observe any difference in the course of the cataracts from a similar series of untreated cases. It may be said that the use of vitamin concentrates, especially those containing C and G, or of diets rich in these vitamins, may conceivably prevent the development of lens opacities or retard the progress of those already formed (though this has not been proved), and is apparently without harmful effects. The same may be said of methods designed to produce active hyperemia of the eye and hence improve the nutrition of the lens. Such methods are the instillation of dionin or the subconjunctival injection of dionin and dilute mercuric cyanide.

There seems to be no real reason to suppose that eye-baths of potassium iodide affect lens opacities in any way, but as usually given they are at least harmless. There is no evidence that foci of infection have anything to do with senile cataract and the only indication for advising their removal in patients with cataract is where this may be supposed to improve the general condition and prepare the patient for later operation.

One thing which general practitioners should understand is that the presence of senile cataract or the suspicion of it is an indication for a careful eye examination by a well-trained ophthalmologist. This is true because of the number of conditions which may occur in the senile eye which complicate the course of cataract or which simulate it. Commonest of these and most important is chronic glaucoma, which often coexists with cataract and produces gradual and painless loss of vision such as prevents any result from an eventual cataract operation. It is important that every cataract patient be carefully examined at an early stage when the media are partially clear so that this condition and others such as optic atrophy and chorio-retinitis may still be detected.

It was formerly considered that a patient with cataract must wait till it became mature before operation should be undertaken. With modern methods, however, it is perfectly feasible to operate at any stage and results should be equally good whether the cataract is mature or immature. Since the procedure is somewhat simplified with a mature cataract, it is a good rule that when only one eye is affected operation should be delayed until maturity. It should be performed at that time, as if delayed much longer a later operation may meet with certain difficulties or the absorption of liquefied cortex may cause damage to the eye. A person with one normal and one aphakic eye will seldom

wear a glass for the aphakic eye, but even without a glass, enough vision is obtained to be of some use, and the eye is ready for use when cataract develops, as it nearly always does, in the other eye.

When both eyes are affected, one will advise operation on the poorer eye whenever vision in the better eye with the best correction is so reduced as to interfere seriously with the patient's normal activities. As previously stated, maturity in the technical sense never occurs in pure nuclear cataract, and no patient should be required to endure years of almost complete disability because a physician has once said, "Wait till the cataract is ripe." Extreme old age is no contra-indication to operation when marked disability from cataract is present. It is no longer necessary to keep the patient perfectly quiet for days or weeks as was formerly the custom and since the operation is done painlessly under local anesthesia there is no danger of post-operative pneumonia. Good results from the cataract operation in the hands of an experienced surgeon are practically certain in the absence of certain complicating conditions which may usually be determined in advance. I quote a recent series of Birch Hirschfeld because it is a large one. Of 543 unselected eyes operated upon, over 50% obtained vision of 20/20, 80% vision of 20/40 or better, while 93% obtained 20/60 or better, which must be considered as exceedingly useful vision. The method he employed happens to be one which I have employed for many years and which has certain advantages which make it a partcularly safe one. It is suitable for either the intra-capsular or extra-capsular methods. It consists in the preparation of a conjunctival flap from above which is freely mobilized before any incision in the eye is made. Sutures are inserted ready to tie when the operation is completed. In this way a flap is always obtained which covers the wound and holds it firmly in apposition. Because of it, patients may safely be allowed up on a back-rest the day of operation and out of bed the following day. Our patients usually remain one week in the hospital. Iris prolapse, hemorrhage, and delayed formation of the anterior chamber are exceedingly rare.

The relative merits of the intra-and extra-capsular operations have been much discussed of late. By the intra-capsular method in which the whole lens and its capsule are removed an immediate result is obtained in any stage of cataract without subsequent needling of a secondary membrane. The methods of performing it are various and each is effective in the hands of the surgeons who have mastered it. The lens may be pushed out, pulled out, sucked out or removed by combinations of these means. I prefer personally the method of Verhoeff in which after iridectomy the upper edge of the lens capsule is grasped by special forceps while pressure is made below and the lens is gently removed by traction and pressure in the erect position. In the hands of the surgeons who have developed a large experience with the intra-capsular method, the number of complications is reduced so that it may be considered as safe as the extra-capsular method. It demands special skill and much experience, however, and when performed without these is especially liable to certain complications, notably loss of vitreous. In certain cases the intra-capsular operation is especially liable to this danger, hence a careful choice of patients for the method is advisable.

In the hands of the average operator the extra-capsular method must be considered safest and in most types of cataract results with it are equal to these with the intra-capsular method. Even in immature cortical cataract by irrigation of the chamber it is nearly always possible to obtain an excellent result, though a certain amount of delay and a subsequent needling are often involved.

CONCLUSIONS

May I emphasize a few practical points just covered by repeating them briefly?

1. It is important to distinguish congenital lens opacities which are stationary from progressive cataract.

2. Patients with senile cataract require careful examination to exclude complicating conditions and careful refraction in the early stages.

3. Non-surgical treatment of cataract is of questionable value and no such treatment has been proved to clear opacities already formed.

4. Operation may be undertaken whenever disability requires it.

5. Both the intra- and extra-capsular methods have a definite place in our armamentarium, but patients should be selected for each method.

The Indiana State Medical Association has more members this year than ever before.

Membership Roster is published on page 678 in this issue.

•

Your 1936 dues are payable NOW!

INHALATION ANESTHESIA; NEWER DEVELOPMENTS*

RALPH M. WATERS, M. D.
MADISON, WISCONSIN

Boston in the middle of the nineteenth century was the last city in the world that a wise child would have chosen in which to be born a bastard. The stigma of illegitimacy has handicapped the early life of many a great man brought into the world in more charitable surroundings, and yet it was here that the poet-physician, Oliver Wendell Holmes, performed the office of godfather and named the foundling "Anesthesia." Paternity of the promising youngster was claimed by dentists, a chemist and others. Accusations and recriminations of the professional and pseudoprofessional gossips of the town accomplished the usual results. No respectable member of the medical profession would offer shelter and nourishment. Doctor Biglow, being careful to avoid personal contamination by actually nurturing the child, placed it in a basket and carried it to London, on the steps of whose hospitals he abandoned the basket and its contents to the well-known charity of those ancient and honorable institutions. For a time the British treatment of the little fellow bade fair to parallel that offered in the country of his birth where for many decades he was destined to lead the life of an abandoned foundling, his usefulness recognized, but without the individual care and education necessary to result in producing a smart and useful member of society. In the United States, the youngest house doctor, the idle general practitioner, and the riffraff of the profession generally were called to administer the anesthetic, and these individuals were paid what their services were worth. Later it became evident that a better service could be rendered at similar or lessened cost if the administration was done by non-medical technicians.



RALPH M. WATERS

The presence of John Snow in London in 1846 made worth while Biglow's trip across the Atlantic. He commanded the respect of his fellow physicians sufficiently to be elected president of the London Medical Society, and yet he had the temerity to take under his wing the new fact, surgical anesthesia, and give to it of his very soul during the remaining ten years of his life. Biglow reached London late in December, 1846. In September, 1847, Snow issued a monograph on ether which contains many experiments with hundreds of animals, still most interesting and instructive to anesthetists of today. At the time of his death in 1858, he was engaged in writing a book which, with one exception, is the only textbook on anesthesia reporting extensive personal researches in the laboratory and in the operating room, together with recognition of the work of others up to that time. He not only experimented with a view to finding the best and safest way to administer ether and chloroform, but he studied the effects of these drugs as disturbers of normal physiology. Damage to lungs, kidneys, and heart were all recognized by Snow. In a search for means of avoiding the physiologic damage caused by chloroform and ether, he tried numerous other hydrocarbon derivatives and reported the characteristic disadvantages of each. Had it not been for Snow, the long line of distinguished British anesthetists, Sir Benjamin Richardson, Junker, Clover, Sir Frederic Hewitt, running down to Boyle, Hewer, Magill, Sir Francis Shipway, and a host of others today, would probably all have become distinguished physicians in other lines.

Meanwhile the tendency in our own country, already mentioned, drifted from bad to worse, always having its influence on neighboring countries. Great systems of surgery were being written with chapters on anesthesia compiled by junior house surgeons, or worse, by lay employees. Occasional men showed enthusiastic interest in anesthesia early in their career but finding no encouragement from the profession, they frequently lost hope and drifted to other fields. The elder Trendelenburg, Tuffier, Matas and Gatch are some of the names connected with excellent early work in anesthesia. The lack of encouragement of effort may be illustrated by the experience of Prince, who administered anesthesia in a great Chicago clinic for three years without a suggestion during that time from the wealthy chief that he receive a fee from the many rich patients whom he served. Technician administration of anesthetics became so prevalent that even our medical schools and teaching hospitals were involved. As a result, medical students were being graduated completely without instruction in either the theory or the art of clinical anesthesia. Once in practice, these men found themselves at the mercy of non-medical advice in matters anesthetic. The drug house detail man was their instructor in the pharmacology of anesthetic agents and the non-medical technician handled the administration.

Such a condition of affairs was, of course, intolerable. The profession, appreciating an impossible situation, has begun to institute the remedy. The great organization, whose guest I am today, has taken a momentous step in this direction. Only by insisting that the practice of medicine be performed by properly recompensed physicians can worth while individuals be expected to make such an employment their life work. The foundation of the remedy must, of course, come through the medical schools. Medical students must be taught

* From the Department of Anesthesia, University of Wisconsin Medical School. Presented before the general meeting of the Indiana State Medical Association at the Gary session, October 9, 1935.

not only the fundamental physiology, pharmacology and physics underlying pain relief, but they must learn, in their clinical years by experience, the application of these principles while they are taught and supervised by physicians who are themselves experts both in the science and the art Whether the economic stress of the past few years has delayed changes in medical school curriculum and faculty, I do not know, but I am sure that school after school during the past five years has awakened to the necessity of remedying the situation.

With the help of slides, I should like to trace as completely as time will permit, the development of inhalation anesthesia from the time of Long, Morton and Snow to the present; first, as to changing technics, and second, as to variation in popularity of drugs, realizing full well that neither the technic nor the drug is ever one-half so important as the fundamental knowledge and skill of the physician who uses the drug and method.

TECHNICS

The inhalers of Morton and Snow consisted merely of a means of control of the patient's inspirations in such a way as to insure that the inspired air should contain sufficient of the anesthetic vapor to produce an anesthetic mixture of adequate potency in the alveolar space. Some extra effort for the muscles of inspiration was necessary to inspire through tubes or valves. Snow recognized this danger and did much experimental work in attempts to obviate it. Both in this country and abroad it was soon found that simpler and cheaper devices served the purpose of offering to the patient an inspired air laden with anesthetic vapor. Sea sponges and gauze or stockinette over wire frames were employed. Cones or cylinders containing gauze or cotton represented a contribution because in such a technic was recognized for the first time the possibility of utilizing re-breathing, or in other words, increased carbon dioxide in the inspired air as an adjunct to anesthesia.

Recognition of the danger of interfering with a normal delivery of oxygen to alveoli was long delayed. Mucous secretion in the respiratory tract and the relaxation of pharyngeal muscles were at first ignored as possible contributing factors to obstruction. The usefulness of adding oxygen to the anesthetic mixture was recognized as a technical aid to smoothness of administration long before it was appreciated that the interference with normal oxygen supply to the tissues, when accompanying anesthesia, accounts for much of the resulting parenchymatous damage to the various organs of the body. The oxygen enrichment of anesthetic mixtures was delayed for the most part until both anesthetic gases and oxygen compressed in cylinders were made available. The inhalers designed and modified after the pattern of Clover, and referred to in this country as the Bennett inhaler and its modifications, first offered the opportunity of using an atmosphere of gases, of vapor laden air, or a mixture of the two with a perfect control of the oxygen pressure in the atmosphere at all times. The temptation in the use of such inhalers was, and still is often great, to neglect the removal of carbon dioxide through restricted addition of fresh agents and reduction of the opening of exhaling valves. The problems of carbon dioxide regulation were studied intensively by Hill and Flack and by your own Professor Gatch early in the present century. The tendency in anesthesia at that time was toward a recognition of the usefulness of an increased carbon dioxide in the inspired atmosphere with a failure to recognize the possible physiologic damage of carbon dioxide excess.

We can scarcely go on to a discussion of modern methods in inhalation without mention of the open drop technic. The administration of ether, requiring as it does a very concentrated vapor to accomplish saturation of the blood and tissues during induction, has always offered the temptation to cover masks with many layers of gauze, towels and even sheets of gum rubber and the like. It is, so far as I can learn, to Doctor L. H. Prince that we owe a true conception of what open drop ether should be. While working in the clinic of Doctor A. J. Ochsner in the early nineties of the last century, he described the true open drop ether method. He used a simple Esmarck mask with covering only sufficient to insure vaporization. A towel reinforced the contact with the face to eliminate leakage under the mask. With very few exceptions in which he increased the dead space during induction, he was able to raise the ether vapor tension of air inspired through such a mask sufficiently to amply saturate the blood and tissues of the patient without restricting the oxygen intake or obstructing respiration. Few anesthetists even at the present day appreciate the possibilities of this technic in the way of delicate control of depth of anesthesia together with maintenance of normal oxygen and carbon dioxide balance. To make the method physiologic, one need only guard against too great elimination of carbon dioxide by increasing the dead space in patients with insufficient premedication. The use of such an inhaler as the Allis or a cylinder over the Esmarck, for induction only, in difficult cases makes Prince's method generally applicable. Oxygen concentration is not reduced nor is carbon dioxide increased. Normal physiology is conserved.

Carbon Dioxide Absorption

Absorption of the "fixed air" of the expired atmosphere by means of alkalis was practiced in physiologic experiments as early as 1788 (Goodwyn). One hundred and twenty-eight years later, Professor Dennis Jackson suggested this chemical reaction as a means of administering inhalation anesthetic agents in a completely closed system. Since his suggestion in 1916, this method

has come into common use and is referred to as the "Carbon Dioxide Absorption Technic." A closed apparatus is necessary into which the patient expires and from which he inspires. While the anesthetic atmosphere is in the apparatus it comes in contact with soda lime (a granular preparation of calcium and sodium hydrate). The alkali, sodium hydroxide, combines with the carbon dioxide, thus purifying the atmosphere and making it fit to reinhale, except that the oxygen which diffuses into the blood to maintain metabolism must be constantly replaced. Two mechanical solutions of the absorption technic are in use. First: A closed circuit, the atmosphere being forced by way of tubes through soda lime and back to the patient by means of a motor or one-way valves. This is often used also in apparatus for estimating metabolic rate. Second: The direct or to-and-fro arrangement in which the patient breathes directly from the mask or airway through soda lime to a spirometer or breathing bag, and inhales from the bag through the soda lime to the mask. In our hands, the latter arrangement has proved more satisfactory in anesthesia.

By the use of the absorption technic, several disadvantages of inhalation anesthesia are obviated; namely—

1. A warm and moist inspired atmosphere is always assured, thus avoiding excess cooling of the patient and disturbance of water balance.

2. An extreme saving is effected in quantity of agents used.

3. There is little contamination of the operating room atmosphere, thus avoiding to a large extent the fire and explosion hazard, while at the same time reducing to a minimum the effects of inhaling more or less dilute anesthetic atmospheres by those working in the operating room. The mechanical details of the technic remain at this time subject to further experimentation.

Airways

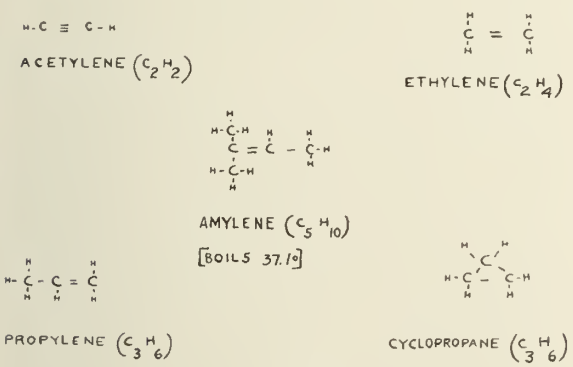
It was early recognized that obstruction to the upper air passages often accompanied the administration of inhalation anesthesia. The relative position of head and mandible are often mentioned as important in the early literature. Within the memory of many of us, the use of a suture through the tongue, or a tongue crusher forceps to pull forward the base of that organ was frequent. Various efforts throughout the years have been made to construct artificial airways of metal or rubber to maintain a patent breathing space to the glottis or beyond. The elder Trendelenburg in 1869 suggested the most drastic method. Through a tracheotomy wound in the neck, he passed a curved metal airway to which a rubber tube and funnel were attached. Anesthetic vapor was added to the inspired air by dropping the agent on gauze covering the mouth of the funnel. Pharyngeal airways of metal or rubber are found efficient today, in holding the base of the tongue away from the glottis and obviating the necessity in most cases of holding the lower jaw forward. To avoid the mutilating operation for the use of Trendelenburg's airway, after much trial and error satisfactory tracheal tubes are now passed through the glottis either via the mouth or nose, affording ample space for free to-and-fro breathing while at the same time making fluid-tight contact with the tracheal mucosa whereby blood and debris can be kept out of the lower respiratory tract. Such airways often add greatly, not only to the convenience of the surgeon, but to the safety of the patient as well.

DRUGS

A discussion of newer inhalation agents can scarcely add much of value to the work of John Snow. With possibly three exceptions, he experimented with all the agents which have come into use since his time, and with literally dozens of others. He knew the objections to the use of chloroform and ether and on several occasions found, experimentally, agents which he thought were definite improvements over these two, carried them to clinical trial and for good reason eventually discarded them. By exposure of ethyl chloride to chlorine gas in the presence of sunlight, he manufactured what he called "mono-chloretted chloride of ethyle." This agent, from his animal experiments, looked promising enough to warrant his using it to anesthetize twenty-two patients, after which he concluded that its instability and difficulty of manufacture precluded its general adoption. In the case of amylene (C_5H_{10}), his experimental experience made him sufficiently confident to use it in clinical anesthesia for 237 cases. Here his conclusion was, after two fatalities, that inability to secure a preparation of absolutely stable boiling point made it too uncertain for clinical use, although in the other 235 cases, he had found it ideally satisfactory, quick in action, easy to administer, pleasant for the patient, with quick and pleasant recovery. It is to be understood that in Snow's time, no oxygen was available as an adjunct to inhalation anesthesia. After reviewing Snow's work, one is very loathe to become enthusiastic about any new agent introduced at this time. Nitrous oxide and ethylene were discarded by Snow largely because he knew nothing about mixing them with pure oxygen. They have since come into use solely because of the availability of oxygen to the anesthetist.

Three new inhalation agents have been suggested in the past few years as useful substitutes and adjuncts, namely: 1. Vinyl Ether; 2. Trichlorethylene; and 3. Cyclopropane. The structural formulae for various agents as depicted in the accompanying figure will, I believe, give a comparative conception of their similarities and differences. With the exception of nitrous oxide, all

inhalation anesthetics up to the present time have been hydrocarbons or their derivatives. The substitution of organic radicals and halogens (even florin) has been attempted in innumerable combinations with the hydrocarbons and tested for its anesthetic qualities. To my knowledge, no modern worker has attempted to repeat Snow's work with amylene. The future usefulness of vinyl ether, trichlorethylene and of cyclopropane is problematic. I can only give you our experiences at Wisconsin to date.



Structural formulae for various anesthetic agents

Divinyl Ether

Snow experimented with what he called "Amylovinyl ether," but did not find it promising enough for clinical trial. The first modern reference to divinyl ether, now marketed as Vinethene, was made by Leake in 1930. He chose this ether from the derivatives of a number of higher alcohols because of its structural similarity to ether on the one hand and to ethylene on the other. Suffice it to say that there has been work done on this agent by Leake, Guedel, Ravdin, Bourne and others. The reports vary widely in opinion. In offering our own experiences with divinyl ether, I can only say that the preparation of the drug furnished us in Madison and administered to animals in Madison does not impress us as a valuable contribution to anesthesia. When administered to dogs the majority of animals failed to show true anesthesia with good muscular relaxation even when the concentration of the vapor in the inspired air was raised sufficiently to approach an irreversible dosage. In many dogs running movements persisted even when respiration was extremely depressed. We have not seen these muscular manifestations when Vinethene has been administered to a few clinical patients; nevertheless, no advantage has been noted over ethyl ether. The smell is quite as distasteful and, although the induction of unconsciousness is slightly more rapid than with ethyl ether, the resulting anesthesia, both from the standpoint of the surgeon and anesthetist, has in our hands been distinctly unsatisfactory.

Trichlorethylene

Trichlorethylene (C_2HCl_3) was first suggested as a specific in the therapy of facial tics, the conception at that time being that the drug had a peripheral action on the distribution of the facial nerve. Jackson, Luckhardt and others have since proved the action to be central and the effect on pain to be generalized even though sub-anesthetic doses are inhaled. Jackson et al., report over three hundred clinical administrations of trichlorethylene for minor surgery. The advantages claimed are quick and pleasant recovery, together with non-inflammability. Experience with this agent at the Wisconsin General Hospital is very limited, although a few administrations have failed to convince us of any advantage over nitrous oxide.

Cyclopropane

On the other hand, our experience with cyclopropane is more promising, although we can make no definite statement at this time as to its future usefulness. It possesses certain characteristics which are highly desirable in an anesthetic drug. It has unlimited potency together with pleasant and rapid induction and recovery. The unlimited potency permits of high concentrations of oxygen administration with it. It has few and very minor effects on general body physiology and metabolism. We have found it to be useful for clinical anesthesia in the greatest variety of cases and it has been administered to well over 5,000 patients at the Wisconsin General Hospital. Nevertheless, we have in progress electrocardiographic studies and pathological studies which have given some indication that it is not entirely without damage to the cardiac mechanism. Until these studies are completed, therefore, we hesitate to recommend the drug for general use. Aside from these three agents, there has been no definite recent contribution to the pharmacology of inhalation anesthesia.

Disappointing as it may seem, recent developments in the pharmacology and technic of anesthesia scarcely promise to revolutionize service to the surgeon, patient and hospital of the future; nevertheless, the prospect is most encouraging. Your own state and university have contributed much to this cheerful outlook. Doctor Arthur Guedel, formerly of Indianapolis and now of California, by his clear cut statements outlining the basic principles and physical signs of inhalation anesthesia, has simplified the task of the teacher of anesthesia for all time; while by his many contributions to the technical armamentarium of the anesthetist, he has smoothed the daily path of many a surgical team. The profession of the state of Indiana and its university may well be proud to claim him as an alumnus.

PERSONNEL

Appreciation and understanding of the fundamental physiology upon which inhalation anesthesia is based have advanced by leaps and bounds during the past twenty years. The obvious and readily discernible application of fundamental basic science principles to clinical practice affords an attractive prospect for the future. As a result, some of the most promising members of the graduating classes of our medical schools are choosing anesthesia as a life work. Schools where modern instruction in anesthesia is available are literally deluged with applications for long term residencies in anesthesia.

THE PATIENT

What might almost be termed the abuse of patients with inhalation anesthesia in this country in the past, has ripened the attitude of the average layman to a point where he welcomes the opportunity to pay an adequate professional fee for careful, capable anesthetic administration by a well trained physician. With the whole-hearted support of surgeons and hospitals, the future economic security of anesthesia is assured.

THE HOSPITAL

The use of the carbon dioxide absorption technic in the administration of inhalation anesthesia obviously will result in marked reduction in the cost of materials. It affords satisfactory control of the fire and explosion hazard of operating rooms; nevertheless, it has not proved satisfactory in the hands of technicians who are unfamiliar with its possibilities and limitations. Our own mail bears eloquent testimony to morbidity and mortality which may result from the injudicious application of the technic by individuals without adequate medical and special training. Really expert medical anesthetists contribute much to the economic welfare of the hospital. Necessary hospital days can be shortened, safety promoted and good will of the public established by intelligent choice and application of drugs and methods.

THE SURGEON

The scope of modern surgery is increasing by leaps and bounds. The central nervous system and the chest cavities are fields barely touched at present, yet preservation of the patient's life and restoration to usefulness in the community often rests on such surgical intervention. For these operations, the surgeon must receive from the anesthetist much more than pain relief for his patient. Control of carbon dioxide and oxygen in the blood and tissues may spell the difference between success and failure. Some delicate operations on the lung, for instance, can only be performed while respiratory movements are under the strictest control of the operating team. The extension of the field of anesthesia to include resuscitation, gas therapy and the therapeutic and diagnostic applications of drugs and methods used in pain relief offers valuable help to all the various departments of the hospital staff.

In conclusion, therefore, I must apologize for the scarcity of promising newer agents which I have been able to call to your attention. On the other hand, the surprising increase in interest and effort of our more recent medical graduates in the fundamental physiology, pharmacology and biochemistry underlying all pain relief, as applied to clinical anesthesia which they themselves administer, promises in my estimation, the brightest prospect for future contributions.

As I have said before, I solemnly believe that the knowledge and skill of the individual anesthetist is far more important than is the agent which he administers or the technic by which he administers it. The following statement made by a prominent surgeon in regard to the care of brain injuries is so applicable that I can not refrain from again quoting it: "Changes in the patient's condition frequently appear so quickly and the period in which favorable action is possible is so brief that life may truly hang by a slender thread, the breaking or strengthening of which is dependent on the quality of the physician's care and skill. By quality is not necessarily meant specialists, but experts—those using the best clinical judgment and the best technical ability." A patient with a brain injury seldom comes to the hospital, whereas many patients have their brains and other organs injured with anesthesia every day. When I first read the above statement, it seemed to me that Walter Dandy was speaking of the patient in surgical narcosis.

The newer developments, therefore, which offer much promise for the future of anesthesia are, I believe, those which are bringing worth while young physicians to an appreciation of the importance and interest which anesthesia offers to the medical practitioner of the future.

1300 University Avenue.

YOUR JOURNAL . . .

for 1935 has contained more reading pages than any previous volume.

This is YOUR JOURNAL. Your suggestions and constructive criticisms are invited.

RECOGNITION AND TREATMENT OF BOWEL OBSTRUCTION*

W. D. GATCH, M. D.
INDIANAPOLIS

DIAGNOSIS

The diagnosis of intestinal obstruction should be based upon a careful clinical history, a complete physical examination, certain laboratory findings, and a roentgenoscopic examination of the abdomen. We wish to emphasize a fact of great importance to the diagnosis and treatment: *The condition of a patient who is thought to have intestinal obstruction is never so urgent as to justify the omission of complete pre-operative study and treatment.*

The cardinal symptoms upon which the diagnosis is made are crampy pain in the abdomen, vomiting, tympanites and constipation. One or more of these may be absent when no obstruction exists. Thus, with paralytic ileus, there is no pain; with obstruction of the colon, vomiting may be absent; with high obstruction, tympany may be absent; and with obstruction of the small intestine or proximal colon, there may be a passage of flatus and feces for some time after the onset of the trouble. Contrariwise, the symptoms of intestinal obstruction may be produced by other causes, for example, renal colic, pleurisy, acute pancreatitis, appendicitis, ectopic pregnancy, and the abdominal crises of leukemia. Every possible cause of the cardinal symptoms should therefore be considered in order to rule out causes other than obstruction for their occurrence. If this can be done, the diagnosis can be made with confidence. The diagnosis should include, if possible, a statement of the cause, site, and stage of the obstruction.

I shall use the common classification of intestinal obstruction on the basis of cause, as a convenient frame on which to hang some observations on diagnosis.

I. Mechanical Ileus.

A. Obturation.

a. Due to neoplasms.
The neoplasms causing intestinal obturation are chiefly cancers, and occur almost always in the colon or at the pylorus. Tumors of any kind arising in the small bowel are rare.

b. Due to foreign bodies.
Fecal impactions, gall stones, phyto- or tricho-bezoars, conglomerations of intestinal worms. A fecal impaction may be due to a "string" cancer of the colon.

c. Due to angio-neurotic edema of the bowel?

d. Due to cicatricial contraction, the result of ulcer of the bowel. This, in the writer's experience, is now rare.

B. Compression.

a. Due to incarceration of the bowel beneath bands, or within hernias.

b. Due to volvulus.

c. Due to pressure of extra-intestinal tumors. Rare except when the tumor is malignant. The duodenum may be compressed by swelling of the pancreas.

d. Due to the distention of cysts of the bowel wall. Acquired cysts and cysts of Meckel's diverticulum.

II. Paralytic Ileus (adynamic ileus).

a. Due to peritonitis.
Peritonitis alone does not paralyze the bowel, but peritonitis plus distention does. A local peritonitis is the most common cause of intestinal obstruction, e. g., appendicitis with local peritonitis involving the cecum and terminal ileum.

b. Due to mesenteric thrombosis.

c. Due to reflex or toxic inhibition of the intestinal musculature. Well illustrated by ileus following fracture of the neck of the femur.

III. Dynamic Ileus (Ileus due to spasm of bowel). Due to lead poisoning or the ingestion of toxic food.

The clinical history is of great importance. Particular attention should be paid to the nature of the onset, whether sudden or gradual, to the occurrence of symptoms in addition to the four cardinal symptoms of obstruction, and to the presence of a reasonable cause for obstruction. Incidentally, one of the most common of such causes is a preceding laparotomy. The occurrence of preceding attacks similar to the one under investigation should be noted. A very important fact is the duration of the trouble. The character and amount of the vomitus, the presence or absence of constipation, the nature of the pain, should all be carefully noted. *If the pain is of sudden onset and extraordinary severity, a cause other than bowel obstruction should be considered.*

It is perhaps needless to point out that a careful and systematic physical examination will rule out most gross errors in diagnosis, such as attributing the tympanites which may accompany pneumonia to intestinal obstruction. In the examination of the abdomen itself, inspection may reveal the presence and extent of the distention, and possibly the presence of strong peristaltic movements. But in the obese, inspection alone may not give very valuable information. Auscultation of the abdomen is of extreme importance. If rumbling borborygmi can be heard, it is certain that the patient does not have a general peritonitis. The absence of borborygmi is to be attributed either to an advanced stage of obstruction, to peritonitis, or to

* Presented before the Section on Surgery of the Indiana State Medical Association at the Gary session, October 9, 1935.

paralytic ileus. Other facts derived from the history of the case, or from the laboratory findings, will usually suffice to determine which of these causes is present. A careful pelvic examination should always be made, and, especially in obese patients, the region of the femoral and inguinal rings, and of the umbilicus should be carefully examined. It is a well known fact that an obese patient may die because his physician fails to discover a small incarcerated femoral hernia.

While no laboratory findings, except those derived from roentgenoscopic examination, are diagnostic of intestinal obstruction, certain laboratory examinations should always be made. The most important of these are:

First, a total and differential leukocyte count. No satisfactory explanation has ever been given for the high total and high polymorphonuclear leukocyte counts which intestinal obstruction usually causes.

Second, the determination of the blood chlorides. In case vomiting has been severe, the blood chlorides will be greatly diminished. The significance of this we wish to discuss later.

Third, the determination of the protein and nonprotein nitrogen of the blood. In case marked dehydration is present, these will be greatly increased. This increase is known to be due to a failure of the kidney to excrete waste products, in the presence of dehydration.

We have come to place more and more dependence upon the roentgenoscopic examination of the abdomen in the diagnosis of intestinal obstruction. It is to be emphasized that no barium should be given by mouth to a patient who is suspected of having bowel obstruction. The accumulation of barium in the bowel may make treatment difficult and may even lead to a fatal outcome. Barium solution may safely be introduced into the colon. It is our opinion that the latter procedure should, if possible, be carried out because it will enable the roentgenologist at once to state whether the obstruction is in the colon, and will make easier the interpretation of any gas patterns which may be observed on the flat plate of the abdomen. The roentgenoscopic examination may at once determine not only the presence of an obstruction, but its site. If the site of the obstruction is near the pylorus or in the colon this determination may be made with certainty. The roentgenologist may even be able, by a study of the number and location of the gas patterns, to determine what part of the small bowel is the seat of the obstruction.

If the foregoing plan of study is carried out, the diagnosis of paralytic ileus can usually be made with a fair amount of certainty. I regard the administration of spinal anesthesia to make this diagnosis as dangerous. Spinal anesthesia has been observed to produce a paralytic ileus.

I shall discuss the diagnosis of the stage of the obstruction under the head of treatment.

TREATMENT

This should be based upon a knowledge of the local and systemic effects of bowel obstruction.

Effects of Obstruction on the Bowel Wall. Obstruction injures the intestine by impairing its circulation. This is caused either by obstruction of mesenteric vessels, or by distention of the bowel.

Obstruction of the mesenteric veins is much more frequent than obstruction of the mesenteric arteries. It may be caused by volvulus, intussusception, or incarceration of the bowel. The compression of the mesentery, which is common to all these conditions, obstructs the veins, but not the arteries. Blood enters the intestinal wall, but cannot leave it. We have demonstrated that under these conditions the capillaries of the bowel are distended by the full force of the systolic blood pressure. This ruptures the capillaries and causes a massive extravasation of blood into the tissues. Rapid necrosis of the bowel results.

Obstruction of the artery alone, or simultaneous obstruction of both vein and artery, causes far less immediate damage to the bowel than obstruction of the vein alone.

Distention of the bowel proximal to an obstruction develops rather slowly. When it produces a pressure, estimated for the human intestine, of 10 to 15 mm. of mercury, it prevents contraction of the bowel. Intraintestinal pressures higher than the diastolic blood pressure prevent all absorption by the bowel, except transperitoneal absorption, and cause an almost complete anaemia thereof. We have shown that this anaemia, constantly present, will begin to devitalize the intestinal mucosa in five hours, and will devitalize it completely in fifteen hours. Under clinical conditions regurgitation of the intestinal contents may keep down the intraintestinal pressure for a long time, and thus prevent devitalization of the bowel. It is, therefore, impossible under clinical conditions to do more than guess the presence of devitalization. Obstruction without devitalization of the bowel is called simple obstruction; with devitalization it is called strangulation. This classification is of great theoretical and practical importance.

I. Systemic Effects.

Death from all forms of bowel obstruction, not accompanied by peritonitis, was for many years attributed to the absorption of poisonous material from the obstructed bowel. Treatment was based entirely upon this belief. Modern study, however, has shown that the absorption of poisonous material from the obstructed bowel occurs only under special conditions. It has restricted the scope of the intoxication theory.

Our knowledge of the systemic effects of bowel obstruction may be summarized as follows:

1. In all acute forms of intestinal obstruction, except obstructions of the colon, there is an enormous loss of water and electrolytes by the body.

This loss, and starvation, are the sole causes of death in the presence of simple obstruction, and may be the sole causes thereof in the presence of devitalization of the bowel.

2. The contents of both normal and obstructed bowel contain numerous substances which are intensely toxic when introduced directly into the blood stream. The intestinal mucosa, as long as it is viable, retains what has been named the power of selective absorption, wherewith it prevents the passage into the circulation of any toxic material found normally in either the intact or the obstructed bowel. Toxic substances, e. g., histamine, proteoses and peptones, present in the bowel contents, diffuse readily through devitalized intestinal mucosa. The bowel below an obstruction will not absorb any toxic material which enters it after the obstruction has been removed.

3. As long as the circulation of the obstructed bowel with devitalized mucosa is arrested by venous obstruction or distention, no toxic material present in its lumen can pass into the general circulation except by way of the peritoneal cavity. We have experimental evidence to prove that under these conditions toxic material does pass into the peritoneum. We have also experimental and clinical evidence to prove that the inflammatory action of the peritoneal surfaces in contact with the obstructed bowel destroys or isolates these toxines, and thus prevents their entry into the general circulation.

4. When the circulation of an obstructed bowel with devitalized mucosa is suddenly restored by relief of the obstruction, it is theoretically possible that the patient may be overwhelmed by the absorption of large quantities of toxic material. The clinical evidence for the possibility of this occurrence is very convincing.

For purposes of treatment, cases of intestinal obstruction may be classified as early or late. All writers agree that radical operative treatment gives highly satisfactory results for the early cases, but very poor results for the late cases. For the latter, death rates as high as sixty per cent are reported. This high mortality is accepted with complacency because radical operation is still generally believed to offer the patient with intestinal obstruction the only hope of life. Death following operation on the cases of late obstruction is attributed, not to the operation, but to the advanced state of the disease. Every case of bowel obstruction is regarded as a surgical emergency. With certain reservations the early case should be so considered, but not the late case. Conservative treatment of the late case is justified by the high mortality following radical treatment, by clinical results, and by our present knowledge of the local and systemic effects of intestinal obstruction.

The foregoing discussion will, I hope, explain and justify the following plan of management. This does not apply, so far as operation is concerned, to the treatment of incarcerated external hernias.

(1) A thorough study of the case, including an x-ray study of the abdomen, a complete blood count, and an estimation of the blood chlorides and non-protein nitrogen.

(2) The intravenous administration, while the clinical study is in progress, of an adequate quantity of glucose and physiologic salt solution. From two to three quarts of solution may be required.

(3) The institution of continuous gastric lavage.

(Since the gas in the obstructed bowel is chiefly nitrogen, it has been suggested that it can be removed by causing the patient to breath pure oxygen.)

(4) If the obstruction is complete, and in the colon distal to the cecum, cecostomy should be performed.

If the obstruction is complete and in the cecum, Witzel ileostomy should be done not far from the ileocecal valve.

(5) If the obstruction is due to peritonitis (appendicitis, pelvic inflammation) localized in the ileocecal region or pelvis, then continuous gastric lavage may be sufficient mechanical treatment. If this fails to reduce the tympanites in a few hours, Witzel jejunostomy should be performed. This type of obstruction cannot be relieved by direct operative attack.

(6) If the obstruction is located in the small bowel, a decision should be made as to whether the condition is early or late. This can best be done when the effect of the gastric lavage and of the glucose and physiologic salt solution can be observed. These measures will often so improve the condition of a patient, who at first sight seemed to be in extremis, that his obstruction will be regarded as "early." If the patient's condition is not improved by these measures—the facial expression ominous, pulse rapid, blood pressure low and the tympanites not reduced—then the case should be regarded as "late" and not subjected to a major operation. The life of a patient in this desperate condition can often be saved by continuous gastric lavage, a Witzel jejunostomy done under local anesthesia, morphine, and the parenteral administration of sufficient physiologic salt solution and glucose. As long as borborygmi can be heard, there is hope.

Operation on the advanced case of bowel obstruction is dangerous, (1) because of the depressed vitality of the patient, (2) because it breaks down protective peritoneal exudates, (3) because of the danger of rupturing distended bowel and (4) because the sudden relief of the obstruction, for reasons already explained, may result in the sudden absorption of an overwhelming dose of toxic material. Slow decompression of the bowel is far safer. Gangrenous pieces of bowel, if present, can be removed after decompression

(Continued on page 661)

BLADDER TUMOR

CHARLES J. COONEY, M. D.
FORT WAYNE

This paper is offered, not with the idea of adding anything new concerning bladder tumors, but rather with the hope of bringing this extremely important and relatively common condition to the attention of the profession in general.

I doubt if there is any disease in which teamwork between the man doing general work and the urologist will save more lives than in this condition of vesical neoplasm. As in practically all kinds of tumor, early diagnosis and prompt treatment count heavily in the patient's chances for survival, and this depends to a great extent upon the keenness and judgment of the family physician, because he is the man whom the patient consults when the first symptoms appear.

About two and one-half per cent of all cancer deaths are due to cancer of the bladder. The condition is found in males at least twice as frequently as in females. It is a disease of later life, the highest incidence being between fifty and seventy years of age. Tumors of the kidney are quite common in children and young adults, but bladder neoplasm is seldom seen early in life. It does occur in youth occasionally, of course; I have under my care at the present time a young man of twenty-four years with benign papilloma of the bladder.

ETIOLOGY

The origin of tumors of the bladder is uncertain and controversial but a few predisposing factors, such as long continued irritation in the form of chronic infection, seem to have some bearing.

A recent development which is very interesting is the discovery that certain coal tar products produce growths in the bladder—the so-called aniline tumors. Dye workers have suffered most from this type of tumor, the toxic agent being apparently inhaled as either fumes or dust and absorbed through the respiratory tract. Recent work[1] tends to show that the carcinogenetic agent may not affect the bladder mucous membrane by direct contact with a toxic urine, but may be circulated in the blood and exert its harmful effect in the terminal capillaries of the bladder mucosa. However, handling and use of finished dyes is in no way responsible for bladder tumors.

CLASSIFICATION

Bladder neoplasms are ninety per cent epithelial in type; the remainder are rarer forms, such as sarcoma, fibroma, and angioma.

Epithelial tumors in order of frequency:

1. Papilloma—forty to fifty per cent of all epithelial tumors.
2. Papillary carcinoma.
3. Infiltrating sessile type of carcinoma.
4. Adenoma and adeno-carcinoma.

PATHOLOGY

Papilloma: The papilloma in its simplest form[2] is a fingerlike elevation or villus of the epithelial lining of the bladder. It has a stalk consisting of capillary vessels with a small amount of supporting connective tissue and an epithelial covering. There are usually numerous villi or fronds. A papilloma may be pedunculated or sessile, depending on whether its base is long and narrow or short and wide.

Papillary Carcinoma: This may very closely resemble a benign papilloma but usually the base is broader and shorter, although not always, and the growth is usually more fixed to the underlying structures. The villi are often closely packed and many of them coalesce, so that the tumor becomes a more or less solid mass. Necrosis is more common in papillary carcinoma than in the more benign growths.

Infiltrating Carcinoma: This is usually a squamous celled epithelioma. It tends to infiltrate the bladder wall with very little projection above the mucosal surface and is of course a highly malignant type.

Adeno-carcinoma: Glands are not found in the bladder but these growths occasionally arise from aberrant tubules at the bladder neck or from the epithelial cell nests of Brünn. This type, too, is usually highly malignant. Adeno-carcinoma is also found as a secondary growth in the bladder by direct invasion from the cervix or intestine.

Histologic Grading of Bladder Tumors: The classification evolved by Broders of the Mayo Clinic is widely accepted and used for the histologic grading of these growths. It assumes that all bladder tumors are potentially malignant and divides them into four groups, according to the number of normally differentiated cells as compared with the undifferentiated cells present.[3]

Carcinomas graded I and II comprise the least malignant tumors and those graded III and IV the most malignant.

Grade I. Three-fourths differentiated epithelium; one-fourth undifferentiated cells.

Grade II. Differentiated and undifferentiated epithelium about equal.

Grade III. Three-fourths undifferentiated epithelium; one-fourth differentiated.

Grade IV. No tendency to cell differentiation.

SYMPTOMS

The first, most important, and often the only symptom of bladder tumor is hematuria. This is usually painless, although later, when infection is superimposed, pain and frequency develop.

[1] R. S. Ferguson: Etiology of Bladder Carcinoma. *Journal of Urology*, February, 1934; Vol. XXXI, No. 2, pp. 122-126.

[2] Eisendrath and Rolnick: Urology. J. B. Lippincott Co., Philadelphia, 1930.

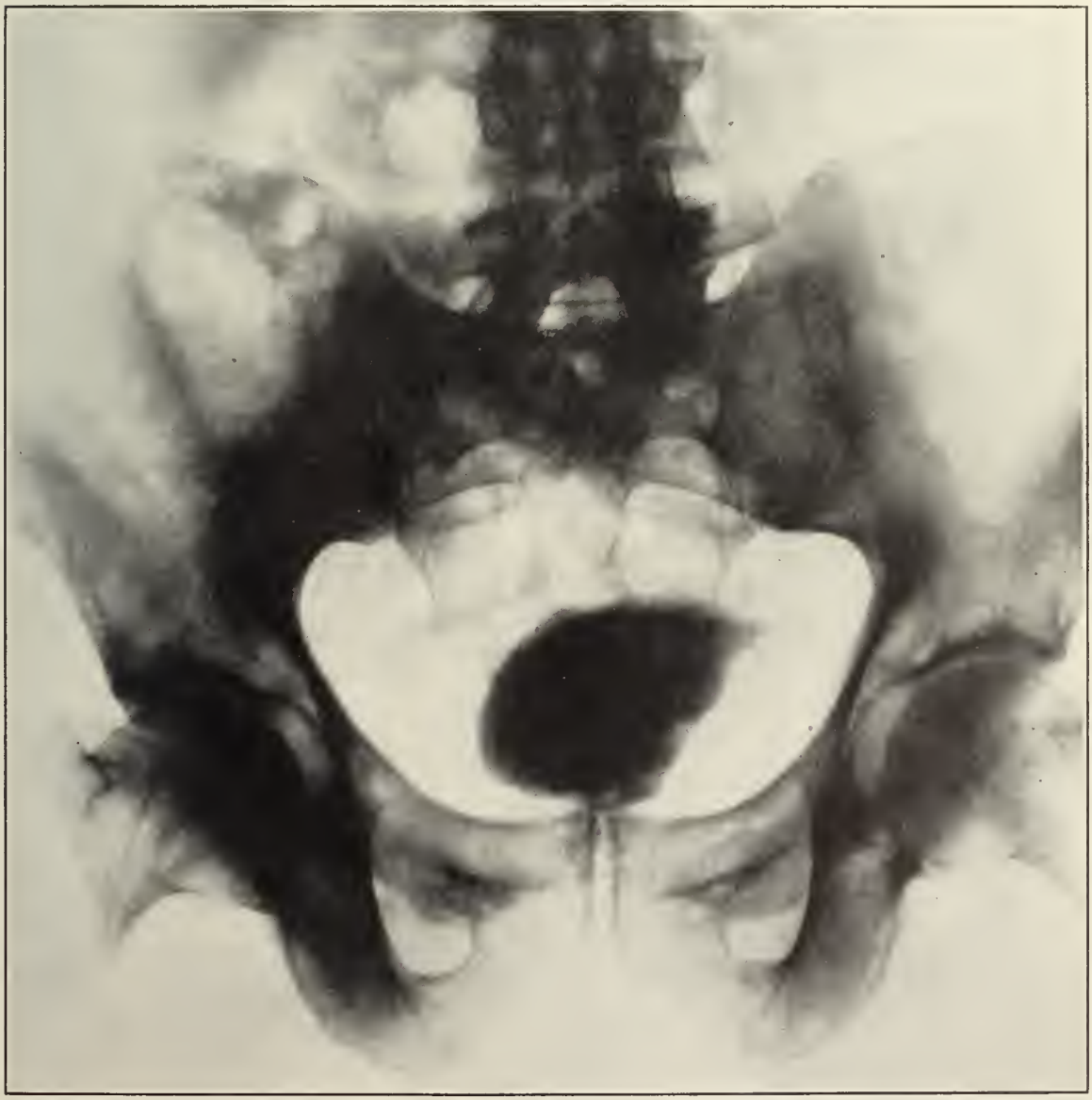
[3] Hermon C. Bumpus: Minor Surgery of the Urinary Tract. Mayo Clinic monograph. W. B. Saunders Co., Philadelphia, 1932.

Hematuria is the initial complaint in over sixty per cent of all cases of bladder tumor, and if this one cardinal symptom were given its proper share of importance by all doctors, hundreds of lives would be saved every year. In a recent survey of 902 cases of bladder tumor in the Carcinoma Registry of the American Urological Association,[4] the records showed that "hematuria continued as the initial and chief complaint of the patient for more than one year before a diagnosis was established in forty-six per cent of all those who complained of hematuria as an initial symptom."

[4] Cancer of the Bladder. A Study on 902 Epithelial Tumors of the Bladder in the Carcinoma Registry of the American Urological Association. *Journal of Urology*, April, 1934; Vol. XXXI, No. 4, pp. 423-472.

It should be clearly understood that papilloma and carcinoma of the bladder are the most common causes of hematuria in men. In women inflammatory causes for hematuria are more common than neoplasm. Every study that has been made of the causes of hematuria emphasizes the necessity for early and complete urological examination when blood appears in the urine.

In many cases the bleeding stops, with or without medication. It may recur in a short time or may not again appear for months or even years, when the growth is hopelessly beyond any measure of cure. This cessation of bleeding lulls the doctor into a false security and causes him to postpone the vitally important thing—a cystoscopic examination.



Cystogram (3% sodium iodide) showing very extensive papillary carcinoma involving the entire left lateral wall of the bladder and a portion of the left bladder base. Note irregular outline and large filling defect. This patient had hematuria at intervals for seven months before he consulted a physician.

Pain and disturbances of urination comprise the distinctive features in about twenty-five per cent of cases, while weight loss and anorexia often characterize the later stages of the disease.

Pain, when independent of urination, is usually felt in the suprapubic region or perineum. Later it may radiate along the course of the sciatic nerve, and this always means an extensive process, with pressure on the sacral nerves due usually to metastatic deposits in the pelvic bones. The pain accompanying urination is often referred out along the urethra due to the fact that most growths are on the bladder base and often involve some portion of the trigone. Late in malignant cases the bladder capacity is diminished by infiltration of the wall, and urination is at very short intervals, making the patient's existence miserable in the extreme.

DIAGNOSIS

The most important step in the diagnosis is for the first doctor whom the patient consults to realize the importance of blood in the urine.

Cystoscopy: Unless it can be demonstrated beyond any doubt that the hematuria is due to nephritis or an acute posterior urethritis, every patient with blood in the urine should be cystoscoped. The urologist may be thought to lay undue stress upon this point but our zeal is due to the frequency with which we cystoscope patients with hematuria and find a very large growth that has been progressing undisturbed for many months, the only treatment having been oral medication "to stop the bleeding."

The cystoscopic recognition of bladder tumor is ordinarily a simple matter as there are very few things to mislead the cystoscopist. However, the differentiation of the various types of tumor and the clinical estimation of the degree of malignancy, in order to fit the treatment properly to the case, requires long experience and good judgment.

Biopsy: This is considered a valuable aid by the majority of urologists and I know of no scientific evidence that it hastens metastasis if properly done.

Cystograms: This method of study cannot replace cystoscopy but often gives valuable supplementary information. Air or sodium iodide in two to three per cent solutions are the common mediums employed. Air embolism is not to be feared if the injection is made by a careful and competent physician.

PROGNOSIS

Benign papilloma, if diagnosed early, is very amenable to treatment and a cure may be expected in most of these cases. They have a marked tendency to recur, however, and should be cystoscoped every six months during the first two years and yearly thereafter until at least five years have elapsed since the growth was completely destroyed. I recall a case of microscopically benign papilloma which remained negative for four and a half years and on what was to be the final examination a small recurrence was found at the site of the original tumor.

In malignant cases the prognosis depends on a number of factors. Again early and accurate diagnosis is the most important point. Next in importance is the type of treatment employed and the condition of the patient at the time the diagnosis is made.

The outlook is usually not good in a Grade III or IV papillary carcinoma or in the infiltrating sessile type of carcinoma, but I have seen many of these cases which are apparently cured.

Approximately ten per cent of bladder tumor cases show metastasis, indicating that this factor is more common than is usually supposed. Metastasis is probably more often by way of the blood stream than the lymph channels, while the infiltrative types invade surrounding structures by direct extension. Bone metastasis is less common than in cancer of the prostate but it does occur. All these facts emphasize the value of routine x-ray examination of the lungs, lumbar spine and pelvis and a careful physical examination with particular attention to the regional lymph nodes and liver.

Growths near the ureteral orifices eventually interfere with kidney drainage and cause renal back-pressure with infection and finally pyonephrosis. Thus many deaths are due to kidney infection or uremia or both. Nephrostomy or ureterostomy will prolong life in these cases.

TREATMENT

Most urologists approach the problem of treatment of bladder neoplasms from the standpoint that all these are potentially malignant, and govern themselves accordingly.

In the benign or simple papillomas there is substantial agreement that endovesical, i. e., cystoscopic methods, should be used. Fulguration or electro-coagulation is employed and the tumor tissue is literally cooked by direct application of the current via an electrode. The mass sloughs away and treatments are repeated at intervals of ten days to three weeks until the growth is completely destroyed. In large papillomatous tumors much time can be saved by cutting away the main tumor mass with the Stern-McCarthy electrotome, using the same loop and cutting current as is employed in transurethral prostatic resection. After the major portion of the outgrowth has been removed, the base of the tumor can be attacked with the fulgurating electrode as described above. I have used the resectoscope in this way on several cases during the past two years and find that it materially shortens the total time required to destroy the tumor. In some cases it is wise to implant radon seeds into the bladder after completion of treatment to decrease the chances of recurrence.

In a second group of cases where a cystoscopic diagnosis of malignancy has been made and no metastasis found, the modes of treatment vary widely. In the less extensive growths, thorough cystoscopic fulguration under spinal anesthesia, fol-

lowed by cystoscopic implantation of radon seeds, is sometimes done. However, I have always felt that the best results are produced by opening the bladder and destroying the growth by electro-coagulation or diathermy and then implanting radon seeds into the base of the tumor. A large de Pezzar tube is placed in the bladder, affording free drainage as an aid to recovery of renal function and evacuation of blood clots. The adequate drainage also keeps the bladder at complete rest and thus facilitates healing. Cystoscopic fulguration is used as follow-up treatment to destroy any recurrences.

Of course if the growth is in a readily accessible portion of the bladder wall, resection of the tumor and a generous area of surrounding normal tissue may be done but experience shows that recurrences are as common following this as following the combination treatment of electro-coagulation and implantation of radon.

Barringer and his co-workers at the Memorial Hospital in New York feel that the use of radium or radon seeds alone offers the best chances in malignant tumor, while Pfahler[5] of Philadelphia has been obtaining good results with high voltage roentgen therapy, with high filtration, supplemented by cystoscopic electro-coagulation of any remnant that does not respond to irradiation. I have never relied upon either of these methods alone and, therefore, am not able to judge competently.

Total cystectomy has never met with widespread acceptance among men handling cases of bladder neoplasm, partly because of high operative mortality and partly because of the difficulty of satisfactory urinary disposal. However, due to the excellent work of Coffey, Quinby, and others, the various two-stage procedures for uretero-intestinal anastomosis and secondary removal of the bladder have found an increasing number of advocates. I believe that many cases now being lost by reliance on the more conservative methods of treatment will in the future be given a better chance by early radical operation.

Thus it is seen that the question of treatment of this condition is still in a state of flux. Only time can determine which method will produce the largest number of five year cures. However, each case must be individualized and treated according to the particular set of conditions found to exist in that patient.

Each method of treatment, whether operative or non-operative, possesses its own pitfalls, which experience and judgment are required to avoid. Destruction of extensive growths by surgical diathermy may go too deep and cause perforation, unless caution is used. Radium or radon in the required large dosage may cause grave toxemia and I have seen death result within the first five days after implantation of too large a number of radon seeds.

[5] George E. Pfahler and Jacob H. Vastine: The Roentgen Diagnosis and Treatment of Tumors of the Bladder. *Journal of the A. M. A.*, Vol. 104, No. 8, February 23, 1935.

High voltage roentgen therapy, unless the kidneys are very carefully protected, may cause nephritis of a combined vascular and interstitial type which can lead to suppression of urine and death. If large doses of radium or x-ray are being used the blood should be examined frequently as leukopenia and anemia are both common results of intensive application of these powerful agents. I believe leukopenia to be more important than anemia, as it makes the patient more liable to succumb to intercurrent infections.

Returning to surgical treatment, there is no doubt that too little attention has been paid in the past to the existence of kidney infection and damaged renal function in these patients and many postoperative deaths are due to these causes. More careful preoperative study will do much to reduce the present high operative mortality of this disease.

CONCLUSIONS

1. The gravity of blood in the urine as a symptom of bladder tumor is too often disregarded at the present time.
2. Cystoscopic examination should be done at the earliest possible moment. It is essential not only for diagnosis but also to obtain accurate information as to the integrity of the upper urinary tract.
3. Metastasis takes place in ten per cent of cases but is later than in tumors of most other organs.
4. The standard methods of treatment at present are fulguration, radiation and resection, alone and in various combinations.
5. Modern methods of urological study and preoperative preparation will lower the high operative mortality of bladder tumor.

RECOGNITION AND TREATMENT OF BOWEL OBSTRUCTION

(Continued from page 657)

has been accomplished. We believe that the high death rate following radical operation for the relief of advanced ileus is partly due to the operation itself.

DISCUSSION

WILL C. MOORE, M. D., Muncie: I think it takes a lot of nerve to attempt to discuss this paper because all I know of intestinal obstruction I have learned from Dr. Gatch.

The only thing I would like to emphasize is that when the picture of the abdomen is taken, it should be taken with the patient flat on his back.

Maintaining the water balance in these patients is very important.

We have been taking the solution or material obtained by siphoning by the Wagensteen procedure and re-inserted it by rectum as a Murphy drip with good results.

It is well to remember that the longer these patients live with an intestinal obstruction before operation, the shorter they live afterwards.

PRELIMINARY REPORT OF AN IMPROVED HYPNOTIC AND SEDATIVE DUE TO THE SYNERGISTIC ACTION OF CALCIUM WITH PHENOBARBITAL

C. C. ROBINSON, M. D.
EAST CHICAGO

Some interesting investigations are suggested in a paper by Ogawa[1] who found a synergistic action incidental to the simultaneous administration of certain barbital derivatives with calcium, augmenting to a marked degree the valuable sedative and hypnotic properties of these barbital derivatives. He found this synergistic property peculiar only to calcium, since small doses of potassium administered with barbiturates, while not injurious, had no influence on its action. Ogawa's results were accomplished with an almost inactive dose of calcium.

It suggested itself that possibly larger doses of calcium would even further enhance the action of barbiturates. Tribasic calcium phosphate and dibasic calcium phosphate were used as sources of calcium; varying doses of phenobarbital with varying doses of these two salts were administered in an attempt to determine a rational combination. Tribasic calcium phosphate produces an anti-acid effect while dibasic calcium phosphate has practically no effect on the acidity of the intestine. Therefore, the effects of phenobarbital administered with these two substances were studied in an attempt to learn whether or not the anti-acid property produced more favorable results. As the results from the use of phenobarbital with both the tribasic and dibasic salts were practically the same, the theory that this synergistic effect is due to an anti-acid may be eliminated. The author does not undertake to attempt to explain this synergistic action of calcium other than to mention the fact that it may produce a more rapid absorption and that calcium is known to affect favorably nervous, muscular, and glandular activities.[2]

In many of the cases studied, pain was a prominent factor and acetylsalicylic acid was included for its analgesic properties. Acetylsalicylic acid was preferred to amidopyrine which has been shown to be the direct cause of a number of cases of granulocytopenia,[3,4] and thus possibly unsafe for routine use.

A combination of phenobarbital gr. 1½, acetylsalicylic acid gr. 5, and calcium phosphate gr. 2 gave satisfactory results. It was found that this combination is neither dangerous nor habit forming, nor is it deleterious to heart functions. There was at no time evidence of cumulative effect. This combination was particularly adaptable to the many conditions in which sedation or hypnosis with analgesia were required.

Forty consecutive traumatic cases were divided into two groups, every other case being given phenobarbital gr. 1½ and acetylsalicylic acid gr. 5. The alternate cases were given this same combination with the addition of calcium phosphate gr. 2. Of particular significance in clinical application was the fact that the combination which included calcium phosphate exerted an earlier and more uniform action as compared with the combination of phenobarbital and acetylsalicylic acid when given alone.

A large number of cases of various types of conditions are now under observation, the results of which will be published in the near future.

CONCLUSIONS

(1) The addition of calcium phosphate to phenobarbital and acetylsalicylic acid seem to produce a more immediate and more uniform action, which is due probably to the synergistic action of calcium when administered with phenobarbital.

(2) The combination of phenobarbital 1½ gr., acetylsalicylic acid gr. 5, and calcium phosphate gr. 2, reacted favorably in all cases studied. There was little difference in the cases in which large and small doses of calcium phosphate (ranging from two to ten grains) were used.

(3) Equally favorable results were obtained with dicalcium phosphate which has practically no action on the alkalinity of the intestine as compared with tricalcium phosphate which is an anti-acid. In view of this, it seems preferable to use dicalcium phosphate instead of tricalcium phosphate in order to avoid any possible decomposition of the acetylsalicylic acid.

[1] Ogawa, Masayoshi: *Folia Pharmocologica Japonica*, Vol. 8, 1933, pp. 1-11.

[2] New and Non-Official Remedies, *(A. M. A.)* 1934, page 131.

[3] Special report of the Council: The relation of Amidopyrine and the Barbituric Acid Derivatives to Granulocytopenia, *J. A. M. A.*, June 30, 1934.

[4] Editorial, *J. A. M. A.*, June 30, 1934.

ACUTE MERCURIAL POISONING TREATED BY THE USE OF SODIUM THIOSULPHATE*

(CASE REPORT)

H. N. MIDDLETON, M. D.
INDIANAPOLIS

Mrs. A., age thirty, colored, weight 108 pounds, took three tablets of 7.3 grains each of corrosive mercuric chloride with suicidal intent, on December 5, 1933. This case was particularly interesting to the writer for three reasons: First, because it was the first case of its kind that I had treated; second, because it gave me an opportunity to use sodium thiosulphate, which is still in the experimental stage in the treatment of mercuric poisoning; and, third, because an interval of three days had elapsed between the taking of the poison and the first use of sodium thiosulphate, which was unique. For these reasons the report is made somewhat in detail.

Ravaut[1] in 1920 was the first to call attention to the use of sodium thiosulphate as an effective

* Presented at staff meeting of St. John's Hospital, Anderson, May 21, 1934.

[1] Ravaut. *Pres. Med.* 28:73, 1932.

therapeutic agent in metallic poisoning. In 1923 McBride and Dennie[2] introduced it in this country. They stated that our text books had ignored for years the fact that non-metallic sulphur is a precipitant for a whole group of metals such as mercury, arsenic, lead, bismuth, zinc, and copper. Pure sulphur cannot be used but its derivatives can. Chief among these is sodium thiosulphate. The latter converts all these toxic metals into the non-toxic sulphides.

I arrived on the case one hour after the poison had been taken. Investigation disclosed that the patient had vomited a half hour before my arrival. The vomitus was bluish, the color of the bichloride tablet. She was in much pain. A stomach tube could not be passed because of the resistance of the patient. A quart of milk with eggs was given her by force. A hypodermic of apomorphine hydrochloride (1/10 gr.) was given, and a half hour later another was given. She vomited, and finally went to sleep.

Time will not be spent in describing the familiar symptoms and clinical findings of acute mercurial poisoning, but simply to mention the enlargement of the parotid and submaxillary glands on the right, the swelling of the jaw on the right, and the development of pericarditis, tremors, and loss of power to grip with hands; in other words, the patient was helpless in bed for twenty-four days, which condition improved after eighteen days of treatment.

The course of treatment consisted of an ounce of saturated solution of magnesium sulphate every morning; an ounce of alkalizing mixture every three hours (six times daily); a mouth wash consisting of a four per cent solution of potassium chlorate and one of equal parts of hydrogen peroxide and water; two quarts of soapsuds enema every morning. All medication was continued for fifty-four days.

The diet during the course of treatment consisted of a glass of orangeade and a glass of milk given alternately every two hours daily; candies and ice cream were allowed; calf or beef liver (¾ lb. daily); and vegetables and oatmeal were added January sixteenth, or forty-two days after ingestion of the poison.

On December eighth, a dose of 7½ grains of sodium thiosulphate was given intravenously, and the same dose was repeated daily for four days.

Upon consultation, larger dosage of sodium thiosulphate was advised, and beginning December twelfth two grams of sodium thiosulphate was given daily for twenty-six days. Pilocarpine hydrochloride (gr. 1/8) and morphine and atropine sulphate (gr. ¼ and 1/150) were given when necessary.

On January twelfth, the dosage of sodium thiosulphate was increased to six grams daily for five days, then decreased to four grams daily for seven days, then two grams on January twenty-fourth, and on January twenty-fifth it was reduced to one gram of the drug which amount was administered daily for four days, or until January twenty-eighth.

The urinary findings were negative on January twenty-seventh and twenty-eighth, after which sodium thiosulphate was discontinued.

On February eleventh the patient complained that something had slipped in her right jaw about three days ago. Previously small spicules of bones and pus were removed from her mouth. She had pain in the right jaw and was not able to open her mouth to eat. The intake of food was through an opening where two incisors had fallen out.

On February fifteenth, an x-ray was taken of the right side of the face which disclosed infiltration of the mandible and deformity at the angle of the jaw. On February twenty-sixth she was admitted to St. John's Hospital for operation. Blood examination: 10,000 wbc; 3,060,000 rbc; Hb 65%. Blood creatinine was 3.8 mgm. per hundred cubic centimeters of blood. There was general improvement in her condition.

Secondary anemia was treated with a tonic mixture until March 1, 1934, the day of operation.

On March first the patient was operated. Four rough fragments of bone were removed from the angle of the jaw, the largest being two cubic millimeters long, and the remainder of the bone was curretted. The alveolar process with four teeth, (two incisors, one canine, and one premolar) was removed from the right side. The patient was discharged from the hospital March 20, 1934, in good condition. Blood examination: 7,000 wbc.; 3,900,000 rbc.; Hb. 69%. The intake of food amounted to 1,600 cc. and the output amounted to 1,160 cc.

On May eleventh her condition was as follows:

Blood examination: 7,900 wbc.; 3,400,000 rbc.; Hb. 58%. Blood pressure was 110/70. Weight 106 pounds.

With the exception that the patient was not able to open her mouth more than a quarter of an inch because of ankylosis of the right jaw bone, her physical condition was good.

SUMMARY

1. A definite history of bichloride poisoning was obtained by seeing it in the vomitus and by recovery of the labeled container with some of the tablets.

2. The symptomatology was definite evidence of the absorption of the mercuric chloride.

3. Sodium thiosulphate proved its worth as an effective therapeutive agent when given intravenously in the treatment of mercurial poisoning, even when begun three days after the intake of mercury by mouth. The total number of grams of sodium thiosulphate used in this case was 120½, given over a period of fifty-one days. The length of time of treatment was 105 days.

[2] McBride and Dennie. *Arch. Dermat. and Syph.* 7:63, January, 1923.

THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION
DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

Office of Publication: 1021 Hume Mansur Bldg., Indianapolis.
Editor: E. M. SHANKLIN, M. D., 5141 Hohman Avenue, Hammond, Ind.
Managing Editor: THOMAS A. HENDRICKS, 1021 Hume Mansur Building, Indianapolis
Editorial Board:
T. B. RICE, M. D., Indianapolis.
PIERCE MACKENZIE, M. D., Evansville.
L. P. HARSHMAN, M. D., Fort Wayne.
ERNEST RUPEL, M. D., Indianapolis.
F. T. ROMBERGER, M. D., Lafayette.

DECEMBER, 1935

EDITORIALS

SPEED MANIA

The Twentieth Century limited train cuts almost two hours from the usual schedule between Chicago and New York; the Broadway Limited follows suit. Less consequential trains in a less drastic manner reduce their schedules. All this is the result of the American mania for going places quickly. This seems to be an age of speed, more speed, and even greater speed. We are no longer content with taking time to go places and do things; we must get them done quickly, and go in less time than ever before.

Upon returning from an eastern city, a short time ago, we chose a train not noted for its speed. Because of a loss of time at one stop, we found that at one time during the journey the train travelled well over eighty miles per hour. We were in no particular rush—simply wanted to get back into Indiana; being somewhat of a pedestrian, such speed is not to our liking, even on a train.

Much has been said about the consequences of speed, especially that having to do with the causation of motor car accidents. The train incident set us to thinking about this business of speed in general. The lay press makes daily comment upon the ever-increasing toll of lives lost in automobile accidents. Our police departments, no matter how efficiently they handle the problem in their local communities, tacitly admit that it is beyond them. Our legislators, despite the fact that they have cluttered up our statute books with non-enforced and occasionally unenforcible laws, seemingly have come to the end of their rope. It appears that the remedy, if there is a remedy, lies in the education of the driving populace. Just how this is to be done becomes another matter.

A "safety drive" was inaugurated in one of our larger cities, a city that two years ago had the worst traffic accident record in the United States. After the campaign had been in effect for a few weeks, there was a noticeable reduction in traffic accidents; drivers were more careful in going about town; they developed a greater respect for traffic signals. However, the "drive" was of brief duration, police officers relaxed their vigilance, and today the situation is as bad as it was before the experiment was undertaken.

The blame is not entirely the motorist's. Mr. John Average Citizen approaches a main artery from a cross street. True it is that he knows this is a "stop" street, but he sees no cars on either side, so he does not stop. He repeats this the next day and the next; soon it becomes a habit. One day there *is* traffic on the through street, and an accident occurs. The remedy in this case lies in giving Mr. John Average Citizen a first class ticket of admission to the local police court, there to learn a lesson at first hand. He will be more cautious after such an experience.

The automobile has become a public necessity. At first it was a pleasure vehicle, but it soon became a business and professional necessity, and it has also become the greatest instrument of death. More deaths have resulted from automobile accidents than were recorded in all the wars of several centuries past. We look upon the casualties of war as horrible, and as horrors that should have been avoided; yet it is with apparent complacency that we read of the daily harvests of deaths from motor accidents. A few days ago, in a city of fifteen thousand population, five people were killed in automobile accidents in a period of some two days. The local press carried the stories; it was talked about the next day, but we daresay that after a week the incident was forgotten except by those families immediately concerned.

Carelessness plus a desire for speed combine to be the most common element entering into this problem. Mix this with a "night out with the other woman," plus an injudicious admixture of alcoholics, and you have all the ingredients necessary for a first class motor car accident.

This question of alcohol, of course, does enter the picture, and it cannot be denied. Some of our over-zealous "drys" are wont to make alcohol the goat for practically all such accidents, but it is only one of the many.

Automobile manufacturers may be to blame, to no little extent, in that they advertise that the new model will "do eighty" or more, and that the car has an almost incredible pick-up. The other extreme is the antiquated junk-heap that still is termed an automobile (licensed as such), though it is a wreck that should not be permitted the use of the public highways. A Chicago justice recently has adopted the plan of condemning such cars, and it is to be hoped that his example will be followed by others of the judiciary.

If we have an opinion as to the solution of the problem, it is that a very strict law enforcement campaign be inaugurated and that the matter be taken out of politics. No doubt the latter part of that statement will create a smile or two, but we *do* know of one city in which a ticket cannot be "fixed." As we have said before, first offenders, forced to appear in traffic court, learn a lesson not soon forgotten. This is especially true in those cities in which traffic court proceedings are broadcast over the radio; the average citizen does not relish having his troubles aired throughout the town.

The medical profession has first-hand knowledge of the traumatisms, the fractures, and the terrible deformities that commonly result from these accidents. We are more than casually interested in the problem before the American people, and we should do our part in bringing about a correction of what is probably the greatest menace in the land today. It is not a problem for any special group; it is a problem for every citizen, physicians included.

OUR RECENT GRADUATES

A resolution was presented to the House of Delegates of the Ohio State Medical Association, at the recent Cincinnati convention, relative to a more personal contact between recent graduates in medicine and the State Medical Association. For a long time we have preached the doctrine of "get 'em in early and they are more likely to become permanent members."

As was pointed out by the author of this resolution, "Too many of our graduates of medical colleges apparently are unfamiliar with the objectives and activities of organized medicine and lack a clear understanding of the benefits to be derived through membership in local, state, and national medical societies." This is at once a truism and an indictment: truism because it is true that we have been lax in looking after the neophytes at a time when they especially need the guidance of older heads in getting set toward the right direction; an indictment because we must admit that we have overlooked, to a very great degree, the urging of these young chaps to identify themselves at once with their local societies.

It has often been said that the county society is the very backbone of organized medicine; without it we would have no state organization and probably no national association. Imagine, if you can, the sad state in which medicine would find itself had we not had the county medical society for the past fifty or seventy-five years. Where would we turn for those exchanges of experiences that go to make up a very great part of present day medical education; where would one seek an outlet for the presentation of his findings? Certainly our medical journals would fall far short of their present efficiency, were it not for our medical organizations. There would be little incentive for a doctor to spend hours and hours in the preparation of a paper if he were not certain that it would receive merited attention.

We must all agree that these premises are correct for we know they are correct, and knowing this, what good reason exists for not getting after our recent graduates and explaining to them the necessity of joining their local county society immediately after establishing an office? Our responsibility does not end there. After these young men have become identified with us, it becomes our duty to see to it that they have some part in our proceedings. We do not mean to say that right off the bat the tyro should be asked to present a weighty discussion, though we have known some who, even in their interne days, stood ready to discourse on any subject with the assurance that their utterances were the very last word!

It is a trite saying that the non-member doctor soon finds himself behind the procession; read as he will, if he does not have society contacts, he soon becomes lost. We are almost prompted to declare that a young doctor with a good teaching background, an active member in an up and going medical society, can keep almost abreast of current medical progress.

The advantages of membership are apparent to us all and it takes but little time to explain them to the younger men. The accomplishments of organized medicine during the past five years alone will supply sufficient argument to convince any open-minded person that such activities should be supported. We do not know just what our Indiana University Medical School is doing in the way of teaching the advantages of medical organization. A short time ago there was presented to the senior students a series of economic talks, by non-faculty members and laymen, but we do not know whether these addresses were received enthusiastically or not. We believe it would be well, if it could be arranged, for some of our official family to deliver one or two addresses along these lines to the senior class each year.

Our efforts need not be confined to county and state societies. There is no good reason why a very great per cent of the membership of these organizations should not be Fellows of the American Medical Association. They are all members, through their membership in their county and state societies, but they are not Fellows. Almost 100,000 doctors are members of the American Medical Association, and all should be Fellows, and a Fellow, if you please, is a member who annually sends in his seven dollars for *The Journal of the American Medical Association*, the largest and most looked-up-to medical journal in the world; it is a veritable encyclopedia of what is what in medicine and surgery. Practically every worthwhile thing that is done throughout the world in connection with medicine and surgery is recorded in the pages of that magazine. With the

present number of Fellows, *The Journal of the A. M. A.* has made a remarkable financial record, and without *The Journal*, the American Medical Association would not have been able to do the things it has done. Who can say, therefore, what might be done if every county medical society member were a Fellow of the American Medical Association?

We are reaching the end of another year. We are all set to get going for 1936. County society officers are to be elected, and plans for the programs for the next year are being made, all of which is very good, but in addition to this, let's set ourselves the task of lining up the youngsters; let's get them started right, and see to it that they keep going right.

POSTGRADUATE WORK

Your president-elect has outlined a definite program for 1935 and 1936, concerning studies of the greatest causes of death, namely, diseases of the heart and blood vessels, and cancer. The Committee on Graduate Education is working hard to get this program under way, and has asked for lists of papers prepared by members of the county medical societies on subjects pertaining to cardiovascular disease and neoplastic disease, and from these lists will be compiled an exchange speaker list. Individuals having meritorious papers will be asked to read them in surrounding counties to their own. In every instance the exchange speaker will be kept within a reasonable distance of his home so that no hardship in the way of expense may be placed upon the individual physician.

Aside from the fact that the information exchanged in the manner proposed will be of inestimable help to physicians, the vigorous planning and carrying out of the program will be proof to the public that Indiana physicians are eager to prevent illness and to know and use every available means to alleviate illness. Indiana physicians have stood at the front in projecting and completing various altruistic programs for the benefit of the layman and the physician; this is another program which requires your help and your "shoulder to the wheel."

Forms have been sent to all county society secretaries, to be completed with the names of available speakers, titles of their papers, and information as to whether the papers are suitable for medical or lay meetings.

If this project is successful, the help of every county society must be given. If you have a good paper on cardiovascular or neoplastic disease, tell your county secretary to add your name to the list. *Give your support!*

THE MEDICAL RESERVE CORPS OF THE ARMY AND THE NAVY

Only within recent years has the medical officer with fighting troops been recognized as an important factor in winning campaigns. Before this time, the medical department was relegated to the train with the wagons and baggage, and its presence was tolerated as a concession to humanitarian demands. Famous surgeons of their time, such as Paré, were often carried along or sent for at the demands of the fighting prince for his personal service. Efforts of surgeons with a fighting force were limited to the period after a battle was over, and only those fortunate enough to have minor wounds were likely to keep alive until reached. One of the most respected of Napoleon's officers in any branch of service was his surgeon-general, Baron Dominique Larrey. He had purchased his respect and important position by giving Napoleon's army an organized medical department of units of trained surgeons and the "flying ambulance" with which he so rapidly evacuated the wounded from the firing line during battle. This efficiency has hardly been improved upon since, except that ambulances are motor-driven rather than horse-drawn.

The present high position of the Medical Corps of both the army and navy has come about through their giving these fighting units something which is indispensable. Instead of being in the background with the camp followers and the animals, the Medical Department is now a separate unit, governing its own affairs. Even during the World War, the Sanitary Train (as the Medical Department with the troops was called) was under the commander of the train. Now each army division has a medical regiment as an integral part of the division under its own colonel as division surgeon. In the fleet, a division surgeon answers for his department directly to the division line commander. This recognition has come about because the medical department has played so important a part in the selection of the men that make up the physically strong organizations that are the army and the navy; because by its advice on hygiene and sanitation, it keeps them well on land and sea, in peace and in war; because during battle and after battle, it conserves the man power to such a high degree, and because of this it helps to support a combat morale so indispensable to the success of any campaign.

The average practitioner of medicine has little liking for war. His ideals are daily those of the relief of suffering rather than the causing of it. To him war is merely an "epidemic of trauma," which a more careful political prophylaxis could very likely have avoided. There are few classes of men who give up so much materially when they go to war as the physicians who leave behind slowly gained practices which they can hardly expect will be waiting for them when they return. However, in

the last war there was no draft necessary for American physicians when a President promised to "keep us out of war." It is safe to say that no draft will be needed again for physicians if we should again unfortunately drift into a war after a government that promised to balance the national budget now promises that at any costs our nation will remain neutral and stay behind our shores.

Does the average American physician realize that if a war came, it would very likely develop rapidly; and that we probably would not have time to send men to a front this time, but that the front might be brought to us? There may be no one to "stand off" an enemy while we prepare another time. In such a situation, we may be sure that all phases of our life will be nationalized. Every citizen will go to a next war, either at home or at the front.

If an emergency arose, three divisions of the regular army, or 90,000 men, are about all that could be mustered. The medical officers of the regular army could only be a nucleus for the number needed for general mobilization. At the present time, the regular army medical officers, medical and dental, are greatly overworked. Besides regular duties, there are the added ones of planning the care of CCC camps, and while there are now being recruited 40,000 new men for the army, there has been no provision made for new medical officers. Further, the medical R.O.T.C., from which the Army Medical Corps obtained about sixty per cent of its new medical officers, has been discontinued entirely because of lack of funds. In a national emergency, 40,000 medical department officers would be necessary to answer the army mobilization needs. What the Army Medical Reserve Corps does not supply, the other practicing physicians and dentists would be called upon to furnish. The ships of the navy do not run on war-time complements, and with about 900 medical officers in the regular navy, if mobilization were necessary, the navy would need more than 3,000 additional medical department officers from private practice to supply the need. It seems reasonable to suppose that in case of need these medical officers should come chiefly from physicians and dentists below the age of forty-five years. There is little or no money allotted to the training of medical reserve officers, and as stated, the R.O.T.C. for medical training is stopped. Those in charge of funds explain that the medical practitioner is already 75% trained, while a reserve line officer knows little or nothing of the duties required of him; hence, they believe that available money is put to the best use on the latter.

The special knowledge needed or desirable for a medical officer is, however, very real. His value to the service he may enter will be greatly enhanced if he knows the peculiar needs of that medical organization, if he has some idea of military tactics and logistics so that he will know his location on the field, and the kinds of trauma and disease to expect, if he understands the problems of looking after the welfare of men under special types of mental and physical strain, and if he appreciates the necessity of discipline for all branches of the service, including the medical.

Any nation that becomes involved in a war does so at the risk of its very integrity. Every part of a war machine must know its proper place in relation to the plans of the commander-in-chief. The medical department should know its duties without demanding any of a commander's precious time and without in any way hindering the attainment of the successful military termination of a campaign. The combat morale of troops can only be strengthened by the assurance that the best possible medical care is at their immediate disposal at all times and in every situation.

If the eligible practitioner of medicine and dentistry will become a member of the Army or Navy Reserve Corps, he will have an incentive and an opportunity to learn the duties of his place in the national defense organization. If no national emergency comes, he has lost nothing, but if one should come, his plans are made in advance. He has before hand chosen the branch of service he would like best, and will at once be ordered to active duty with pay, but in order to adjust his affairs he may be allowed to proceed in ten, thirty, or even ninety days, according to the nature of the emergency.

If one is interested in learning about classes of service and requirements of the Naval Reserve, he should write to the Commandant, Great Lakes Naval Training Station, Great Lakes, Illinois; if he is interested in the Army Reserve, he should apply to the Executive Officer, Headquarters Indiana Military Area, Indianapolis.

OUR ASSOCIATION IN 1935

The Journal wishes all of its readers a very Merry Christmas, and a New Year of the sort that will bring back the memories of " 'way back when." The past year has been one of many accomplishments, both in the Indiana State Medical Association and with The Journal.

The Association has prospered. There is an increase in membership over the previous year. We have not had to use red ink in our accounting department. We have accomplished much. Our officers have carried on in accord with the traditions of the past; they have met every problem and have found what appears to be the proper solution. Reviewing the more than thirty years during which we have been more or less intimately acquainted with the organization, we are prepared to say that the year 1935 finds that organization better established than ever before. Headquarters has accomplished more than at any time in the past. In fact, we wish that some time a fairly accurate analysis might be made of the prodigious amount of work carried on there.

Our various standing committees have nobly stood by their work, seeing it through. Among those having frequent meetings may be mentioned the Bureau of Publicity and the Executive Committee. The Bureau is one of the outstanding agencies of our State Association. Not only the medical profession of Indiana, but the lay residents as well have come to look upon the pronouncements of this committee, through their weekly releases, for up-to-the-minute advice on many subjects pertaining to health. It is the very timeliness of these releases that make them so interesting. In the vacation season, Hoosier folks are told of the things that should be avoided when they are away on trips. July Fourth celebrators are warned of the dangers of injuries from explosives. The hunting season calls forth the warning signals. Winter winds, slushy streets, and sudden temperature changes are prone to bring on the common cold, we are told. Thus for fifty-two weeks each year do we, through this department, reach the reading public.

The Executive Committee, which manages the business side of the Association, is an extremely busy group, and it is not uncommon for their monthly sessions to extend for a matter of several hours. Problems of all sorts are constantly referred to this group, and we would recommend to each of our members that they carefully read the monthly reports in THE JOURNAL. (We assume that you read the reports of the doings of the Bureau.)

The Council, that body whose functions are so commonly misunderstood by the average member of the Association, is in reality a group of workers. It is they who keep the contacts with the county medical societies, those organizations which are the backbone of the Association. It is true that the Council meets but twice a year, but at these meetings each member gives the "low down" on what is happening in his district.

We might well carry on for a great length, giving in detail the work that is done by other committees, both standing and special, but we will have to be content with the statement that they are functioning in top form.

Our modesty compels us to leave the success of THE JOURNAL staff to the analysis of our readers; however, we may say that while we are not wholly satisfied with the accomplishments of the past three years, we do believe that the staff has given you a readable, informative magazine. As we have often said, our endeavor is to make THE JOURNAL reflect Indiana medical opinion rather than to create it. Mechanically, we believe THE JOURNAL has improved. We have not only the staff to thank for what has been done with this publication, for our members have been most generous in their support; and their pleasant comments, and kindly criticisms have done much to hearten the staff.

You have received more and, we believe, better reading pages this past year than during the first two years under the present management. Indiana physicians have acquired the faculty of writing these past few years. We can recall only a few years ago when we received occasional telegrams from Doctor Bulson, asking us to secure some papers for him, posthaste, and while we do not have a plethora of material now, we usually have plenty at hand.

Thus, in this month of December, the end of another year, we are given to felicitations and to thoughts of celebrations of various sorts; we pat ourselves on the back, content with the feeling that ours is one of the outstanding state medical organizations. Our officers are alert to every interest of the membership, our committees are working as committees never worked before, and our JOURNAL is *good*, so we bid farewell to 1935, and welcome to 1936, the New Year, the time when we start anew and look forward to even greater accomplishments.

EDITORIAL NOTES

It is time to pay your dues for 1936!

IDEAS expressed at the annual conference of secretaries and editors by Dr. Ralph H. Pino of Detroit and Dr. D. F. Harbridge, secretary of the Arizona State Medical Society, upon the need of good postgraduate instruction, emphasize the necessity for the 1935-1936 educational program that is planned here in Indiana.

LETTERS have been sent to some physicians by the American Foundation Studies in Government making inquiry about sickness insurance. If you receive such an inquiry, give it your careful attention. Do not reply without giving the subject some real study. If you are familiar with the facts, you will not err in your reply, but *do not* reply to inquiries or questionnaires carelessly.

PASTMASTER in the art of speaking impromptu, Morris Fishbein, editor of *The Journal of the American Medical Association,* commands our utmost respect for the manner in which he portrayed the doings of one of our state medical associations, during the secretaries'-editors' conference. We shall have more to say on this subject in an early number of THE JOURNAL.

AT THE secretaries'-editors' conference in Chicago, it was suggested that a survey of all medical organizations should be made, to determine their value to the profession and to the public. Organi-

zations that are managed by an individual or a few individuals for their own profit, without particular regard for benefits to anyone, should be exposed and forced to discontinue. We believe that such a survey would be worthwhile and it might be interesting.

DR. KELLOGG SPEED, speaking before a Chicago committee having to do with the study of providing more and better ambulance service for accidents in that city, stressed a very important point when he urged less handling of the injured by laymen. He said that it was far better to await the arrival of the ambulance surgeon, and pointed out the likelihood of aggravating an injury by injudicious handling of the patient, particularly in those cases in which fractures had occurred.

DR. J. TATE MASON, president-elect of the American Medical Association, made a statement that President Roosevelt had said, in regard to new plans for health insurance, that "I am going to wait until public opinion is moulded." Dr. Mason spoke of the fact that this was a wise statement for the President to make, and that the physicians are the ones to mould public opinion in this matter of health insurance. He stated that the physicians of America see approximately one million people per day. What an opportunity!

MOST county societies hold their annual elections early in December. This year it is very important that reports of officers elected be sent in to headquarters at once if they are to be published in the forthcoming edition of the American Medical Association directory. It is surprising how often this information is used. In our own experience there seldom is a week when we are not asked something or other about some county medical society, over the country, and it is a matter of but a few moments for the secretary to get this information on the way; thus these reports of elections are of great importance to the publishers of the directory.

IT IS not too early to begin casting your weather eye about, looking over the early birds who plan a try at "getting on the ticket" next primary day. We would especially recommend that those who seek legislative posts be given a most careful scrutiny. It is a lot easier to beat a chap in the primary than in an election, and concerted effort on the part of even a small medical group will work wonders in this direction. A good question to propound to these aspirants is regarding their attitude on socialized medicine. Judicious inquiry will soon bring out any ideas that they may have on the subject.

THE Michigan State Medical Society has announced several changes in its official family, having chiefly to do with the office of secretary. Since the resignation of Dr. F. C. Warnshuis, Dr. Burton R. Corbus has been acting secretary. Under the new arrangement, Dr. Clifford T. Ekelund becomes secretary, and Mr. William J. Burns is executive secretary. The business offices are transferred from Grand Rapids to Lansing. Thus does another of our state medical organizations become modernized. It is our belief that a lay executive secretary is a most necessary adjunct to an up-and-doing medical organization.

WE HAVE noted a campaign on the part of women's clubs to secure an eight thousand dollar fund for the purchase of radium to be used in the Indianapolis City Hospital. We are of the opinion that the energies expended in this campaign would be much better applied to cancer education among these women. We do not quite understand why a city hospital which has been supplied with x-ray equipment and other equipment required in the treatment of ill persons should appeal to women's clubs for a supply of radium which should be supplied by the city through taxation as probably was the case when other equipment for the hospital was purchased.

REPORTS are just beginning to reach us concerning the results of debates on socialized medicine, which are being conducted by clubs and social organizations everywhere. The subject has become a topic for bridge-table discussions. Recently the Columbus Rotary Club conducted such a debate; a vote before the debate disclosed that four members were in favor of socialized medicine and twenty-four opposed it. Following the debate seven members favored it and twenty-one opposed it. The forcefulness and effectiveness of debaters has much to do with subsequent opinions. Every physician should prepare himself to supply an adequate and forceful discussion of this subject.

AT THE October meeting of the Ohio State Medical Association in Cincinnati, a resolution was introduced asking the House of Delegates of that body to consider the possibility and advisability of establishing a Speakers' Bureau for the purpose of providing county and district medical societies with speakers, on request. We can tell Ohio that the plan is not only worth while and effective, but is appreciated by the local societies, if the demands made upon the service are indicative. Indiana long has had such an arrangement through its Bureau of Publicity, but it goes a step further than Ohio proposes in that speakers are supplied for lay organizations as well as medical organizations.

THIS year marks the twenty-ninth appearance throughout the United States of the National Tuberculosis Association's Christmas seals. With the distribution of the stamps goes the message that tuberculosis still is one of our greatest health problems. It causes 70,000 deaths annually, twice as many as automobile accidents. It is the greatest cause of death between the ages of fifteen and forty-five. It causes over a billion dollars economic loss each year. The National Tuberculosis Association depends upon the sale of seals for furthering its work, and we heartily endorse their statement, "It takes Christmas seals to make it Christmas mail." Use them on your December statements.

ON OR before the first day of July of each year, every person (physicians included) who imports, manufactures, produces, compounds, sells, deals in, dispenses, or gives away opium or coca leaves, or any compound, manufacture, salt, derivative, or preparation thereof, shall register with the collector of internal revenue of the district his name or style, place of business and place or places where such business is to be carried on, and pay the special taxes provided. The foregoing is according to the law. In past years, some physicians have been dilatory in completing their applications for permits, and have filed them after July first. In some instances, fines are being exacted for this delay. The cost for the permit to a physician is only one dollar. To delay filing the application is carelessness, and may prove to be expensive.

THE sixth annual high school debate conference will be held at Purdue University, December sixth and seventh. Some seven hundred debaters and coaches will attend. The subject for discussion is socialized medicine. At the general session to be held at ten o'clock in the morning, December seventh, discussions will be presented by Dr. Morris Fishbein for the negative, and by a speaker to be selected for the affirmative. Any one interested will be welcome. The conference is not limited to debaters. Any person who is interested in speech is welcome to attend, and since the subject this year is "State Medicine," prospective entrants in debates on that subject will profit by attending. Professor P. E. Lull, Director of Forensics, will supply programs if requested. Registration fee of twenty-five cents will be charged.

"THE MENACE OF MARIHUANA" is the title of a readable paper in the *Medical Record* for October 2, 1935. Many physicians, it seems, are not familiar with this form of narcotic, yet the writer states that in certain sections of the country one out of four represents the percentage of smokers of this weed, botanically known as *cannabis sativa.* In our county, where there is a considerable Mexican population, this weed is very commonly used; police officers and federal operatives have found it growing in the backyards and in the vacant lots adjacent to the homes occupied by these folks. In addition to sexual stimulation, the smoking of this weed produces visual hallucinations and at times brings on maniacal tendencies. We have seen but one of these smokers in action but that one was enough to convince us that the weed might better be left alone.

HERE is just a word of advice from an "old timer" in the matter of choosing your county medical society officers for 1936. We cannot afford to have any dead weight in this group, as there will no doubt be a continuance of the propaganda for socialized medicine. Lots of folks will be listening to high school debates on the subject this winter, and many of them will take a liking to the notion of getting medical service for nothing. We must depend upon our county medical societies to offset this thing, and unless alert officers are chosen, we may have some disasters. It is all perfectly well to "honor" some chap with an office in your county medical society, and it sounds good at the time of the election, but usually it does not work to the advantage of the society.

The New York State Journal of Medicine for September, 1935, directs attention to a new evil, that of advertising diathermy machines directly to the public. While we have seen but one or two such advertisements, it is apparent that they are numerous. In a quoted ad it is stated that this equipment will materially aid such diseases as rheumatism, sciatica, lumbago, neuritis, arthritis, asthma, pneumonia, and hay fever, as well as other ailments. It is, of course, apparent that such advertisements lead to a false security and thus they form but another argument in favor of a drastic change in our federal laws. To repeat a phrase we have often used, the federal government seems vitally concerned with what appears on the label; the thing advertised through the lay press seems of little concern to our Washington authorities.

WITHOUT wanting to devote too much space to comment on speakers at the recent secretaries'-editors' conference in Chicago, we do feel that we must mention one who has long attended these sessions, and that is Holman Taylor, of Texas. Taylor is one of those chaps who has the ability to say something on almost any subject, and to say it well. As presiding officer at the round-table discussion, following the evening dinner, he proved to be an admirable director, leading the discussions into paths that the average editor likes to trod. Another with whom we like to meet is Earl

Whedon, secretary-editor of the Wyoming State Medical Society. There are 171 physicians in the State of Wyoming, more than 150 of whom are members of their state medical society! A half dozen Indiana county societies have larger memberships than this, but Dr. Whedon goes right along, quite as though he guided a membership of several thousand. He wields a most trenchant pen in the few pages allotted to him in *Colorado Medicine*, and it is to these few pages that we turn every month to read the writings of one of the most dynamic characters we have met in the field of medicine.

SOMETHING or somebody has put a lot of pep into the Kansas State Medical Society. For some months now we have been observing a note of improvement in that organization, in one way or another. Now they come out with something spick, span, brand new, and something that is *good*. It is officially entitled "A symposium of miscellaneous topics pertaining to socialized medicine prepared by the Medical Economics Committee of the Kansas Medical Society for Kansas debaters on this subject." It covers some twenty full-sized mimeographed pages and is replete with information of the sort that is "eaten up" by debaters on the subject, whether they be of the high school variety or grown-ups. They start with some of the affirmative declarations, giving attention to the rather widely distributed set sent out by the Pollak Foundation, and each declaration is met by an answer which is based on actual experience in the State of Kansas. The material is concisely presented and is so much to the point that every member of the medical profession could well spend an hour in its reading. We recommend that headquarters make some arrangement whereby this excellent matter may be widely disseminated in our state.

THE Indianapolis Better Business Bureau scores again in the matter of protecting citizens of that city from plotters and schemers. A gentleman walked into the advertising department of the Indianapolis *Star* with advertising copy regarding a "cancer clinic" he proposed to establish in that city. The *Star* referred him to Secretary-Manager Overley, of the Bureau, suggesting that it would be well to have the endorsement of that organization. It seems that the chap was persistent; most folks would have backed out, pronto, but he did not. Instead, he betook himself into the office of the Bureau and explained his errand. Mr. Overley at once suggested that the Better Business Bureau would be glad to select a committee of physicians, and an approved laboratory where the merits of the "cancer cure" might be properly demonstrated. The owner of the secret formula demurred, whereupon Mr. Overley advised that not only would the Indianapolis press not accept the advertising, but that the Bureau would see to it that the "clinic" did not carry on. The promoter left, with the declaration that he would seek more favorable quarters for his experiment. We have long since come to the conclusion that the Better Business Bureaus of the country are very important cogs in our business life. This incident supplies additional proof of that fact.

FOR some four years we have been attending the annual secretaries'-editors' conference in Chicago, sponsored by the American Medical Association. We have come to look forward to these gatherings where we meet some old faces and some new ones. This two-day session results in much good to the organized profession of the country. It is a conference in every conception of the term; it is a place where ideas are exchanged and where those in charge of our state associations and journals speak of this and that, all for the common good of the profession. Contacts are made at this conference that are impossible elsewhere. We meet with the men who are making medical history; we become better acquainted with the officials of the American Medical Association; in fact, this gathering is a cross section of medical America. From time to time, through the columns of THE JOURNAL, we shall have something to say about the things that interested us at this meeting. We should like very much to comment on some of the folks whose acquaintances we have cultivated, things of a personal nature that came to our attention in this brief session. Matters economic, while they appeared in the program, did not occupy the entire attention of those present, a thing which pleased us mightily, for we have come to the conclusion that too much attention is accorded this subject and that other matters need more of our thought. The full program will appear in a subsequent issue of *The Journal of the American Medical Association*, and we would urge our folks to read it carefully.

IN AN ARTICLE[1] on "The Treatment of Diabetes in Children," by Morris Deitchman, M. D., of Youngstown, Ohio, attention is called to the fact that through insulin, diabetic children are growing to maturity, and their care is becoming a problem that must have consideration. The heredity of diabetes, in which interest is growing, is demonstrated through a study of 675 diabetic families investigated by Gregory Pincus and Priscilla White, from whose study it was concluded that diabetes is inherited as a mendelian recessive, and the incidence of diabetes is predictable on the following basis:

1. If two diabetics marry, all of the children will be diabetic.
2. If a diabetic marries a non-diabetic, with a diabetic heredity, 50 per cent of the children will be diabetic.

[1] Ohio State Med. Jour., Nov., 1935, Vol. xxxi, No. 11, p. 844.

3. If two non-diabetics, both having a diabetic heredity, marry, 25 per cent of the children will be diabetic.

4. If a diabetic marries a non-diabetic, with a clear heredity, none of the children will be diabetic.

Dr. Deitchman says that the treatment of the uncomplicated diabetic is based on diet, insulin, and exercise, and there are four control standards that must be fulfilled: (1) Adequate nourishment; (2) blood sugar below 200 mgms.; (3) glycosuria less than 10 gms. in 24 hours; and (4) cholesterol content of the blood below 230 mgms. An uncomplicated case may be converted into one that will show evidence of transitory or permanent deficiency if these control standards are not maintained. Because modern treatment has made it possible for diabetics to live longer, the number of patients with diabetes is steadily increasing, and therefore their care becomes a matter of increasing importance to every physician.

DR. JOSEPH COLT BLOODGOOD has gone on, and in his passing the medical profession loses one of its chief members. Possessed of a kindly and pleasing personality, plus a background of which but few men may boast, he had endeared himself to those with whom he came in contact. A surgeon of more than ordinary ability, he might have carved a niche for himself in the hall of fame had he chosen to restrict his talents to that branch of the profession. However, early in his medical career he became imbued with the notion that an intensive study of the cancer problem was one of the most needed things, and to that end he directed his talents. That he was successful in this is evidenced by the fact that he was universally regarded as an authority on the subject. In the later years, his practice was devoted entirely to this phase of surgery and much of his time was occupied in teaching the early recognition of cancer. His cancer clinics, held throughout the country, were generally conceded to be the most thorough, the most instructive, and the most convincing. We have heard many patients at these clinics express themselves to the effect that they had been in the hands of a master. On two occasions we had reason to consult him as a patient, and it was in that connection that we knew him best. For several days, accompanying him on his daily rounds, opportunity was given to observe his work at first hand. He was an adept in his handling of patients; his gentle approach, his very assurance to the patient that all was well, were revelations of kindliness and thoughtfulness. In recent years he had been very active in the affairs of the American Society for the Control of Cancer, and he contributed much to that worth while organization. His writings were voluminous and he commanded large audiences whenever he spoke or wrote. We recall his modest affirmation that "The reason we have less cancer in the Baltimore area is not because we are better surgeons, but because we are more persistent teachers regarding the early recognition of cancer." Joseph Colt Bloodgood has left a heritage that will long endure in the annals of American medicine; he has made a name that will live long in our archives.

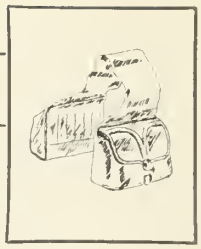
THE question of ownership of x-ray films has been settled in the State of Michigan, where the supreme court recently handed down a decision in the matter. The case involved the collection of a bill by a physician, the defense maintaining that he had not made frequent reports to the employing company and that he had refused to turn over the films he had made in connection with the case. Stating that "the plaintiff was fully justified in failing to surrender possession of the x-ray negatives," the court went on to say that "these are the property of the physician or surgeon who had made them." The court goes on to say:

"Further, plaintiff was fully justified in refusing to surrender possession of the x-ray negatives. In the absence of agreement to the contrary, such negatives are the property of the physician or surgeon who has made them incident to treating a patient. It is a matter of common knowledge that x-ray negatives are practically meaningless to the ordinary layman. But their retention by the physician or surgeon constitutes an important part of his clinical record in the particular case, and in the aggregate these negatives may embody and preserve much of value incident to a physician's or surgeon's experience. They are as much a part of the history of the case as any other case record made by a physician or surgeon. In a sense they differ little if at all from microscopic slides of tissue made in the course of diagnosis or treating a patient, but it would hardly be claimed that such slides were the property of the patient. Also in the event of a malpractice suit against a physician or surgeon, the x-ray negatives which he has caused to be taken and preserved incident to treating the patient might often constitute the unimpeachable evidence which would fully justify the treatment of which the patient was complaining. In the absence of an agreement to the contrary, there is every good reason for holding that x-rays are the property of the physician or surgeon rather than of the patient or party who employed such physician or surgeon, notwithstanding the cost of taking the x-rays was charged to the patient or to the one who engaged the physician or surgeon as a part of the professional service rendered. Careful research indicates that the question here present is one of first impression."

Thus we have a court record in a matter that long has perplexed the profession, and the ownership of x-ray films seems to be established definitely. We are prompted to remark that the indiscriminate handing out of x-ray films is a most abominable practice, and sooner or later it is bound to lead to results not entirely to the liking of the physician who indulges in such a practice.



INDIANA MEDICINE IN RETROSPECT



L. G. ZERFAS, M. D.
Historian, Indiana State Medical Association

THE MITCHELL-DUNLAP-COE CONTROVERSY

(This is the third and concluding article of the Mitchell-Dunlap-Coe controversy.)

"Messrs. Douglass and Maguire:[27]

"On the perusal of a late communication to the public by Ex-President Coe, I am at first blush presented with a *humble appeal*, portraying his *gentleness* and *mild behaviour*. He states, he 'was very careful neither to assail the character or motives of the other gentlemen concerned'. Now I would ask the reader what greater insult could be offered to their understanding than this assertion. Did he not, in his first communication, assail the character, when he took upon himself the authority to warn the public to beware of this society, that a license granted by them would be of no value; and further, conveying an idea that qualifications in the members were wanting? Was this not virtually calling us swindlers and empirics? Was it not calculated to injure our standing and reputation? This is the *mild* and *conciliatory* manner; and yet he affirms, 'it was not an attack upon the motives or characters of the gentlemen concerned'. Even this was not the first insult; his debut in the French school room will long be remembered by those present, and will be cited as a sample of arrogance, and ignorance and low-breeding.

"The French school room, in a large brick room on Washington street, adjoining the Washington Hall, in the most public part of town, where the society met, is the grocery loft he tells of. The public may have an idea how far the representation of this man can be relied on, and what ideas he wished to send abroad. It is not customary in advertising meetings of this kind, to name any particular room, kitchen or loft, but it is natural to infer that we would assemble at the most public place in town, and ascertain where a room could be had. It appears that Dr. Coe came in the morning next door to where the society met, and had some conversation with Dr. Morris, but I believe no other person saw him. He stated the by-laws vested him with authority to appoint the meeting; the by-laws were read in his presence and nothing of the kind was found. He next stated that he had notified Dr. Morris to appear at his home, this Dr. Morris rose and denied. He goes on to say: 'I mention these circumstances at length that everyone may judge whether there was not a concerted plan to hold a meeting secretly to avoid my being present.' Men often judge others' motives by their own. How was it when the State Society met at his house last winter, when he notified me to attend at a certain hour in the evening; I went at the precise time, when I found the meeting had been held, business completed, and all returned home. At that time I concluded it was merely accidental; but since I see others so suspicious it induces me involuntarily to apply his favorite saying, that there is something 'rotten in Denmark'.



Dr. Pierson Murphy
1800-1864

"As to the difference of opinion on points of law, I think it unnecessary to say anything more on that subject, as it will come before disinterested persons and be tried upon its merits; and since he has harped at so small a matter, a mere bubble, and inasmuch as none but himself were of his opinion, I will take no farther notice of the matter.

"The Doctor, with much ease of conscience, can insinuate to the public of my never having a license to practice anywhere, when he to his certain knowledge knows of my having read between three and four years, attended a full course of lectures, was examined, and received a license and a recommendation to the public by some of the first medical men in the state of New York, who could examine his worship to his heart's content. He furthermore says, I practised without a license in this state. Let us inquire into the matter.

[27] Indiana Journal, Indianapolis, June 2, 1830, Vol. 8, No. 371, p. 3, c. 1.

A district was laid off in 1821, and some of the physicians in the District were authorised to meet and form a society; and a society must have its officers, to wit: a President, Secretary, Treasurer, and three Censors; Dr. Coe was chosen President, and Drs. Coe, Mitchell and Dunlap Censors. Now if those persons named were not, to all intents and purposes, licensed to practise, why vested with authority to make its officers and grant licenses to others; and why did Dr. Coe vote for me as a delegate in the state society at Corydon, at which time I was elected Secretary of the state society? He knows very well that we have examined candidates for licensure together, when we have both admitted and rejected; and if that was so incorrect and illegal, why was his conscience not told of it? I suppose it has acquired increased sensibility since that period.

"He states that his qualifications have been tested by an examination before the Censors of the third Medical District,[28] but of what amount is all that, when students of one year and eighteen months application, I am credibly informed, were admitted by the same society, and until I have better evidence than I have ever yet had, I am bound to believe him of the same stamp—as after being defeated in several different occupations, he at length resorted to the study of medicine and with his two courses of lectures grounds all this egotism and bombast. And why has the skill of this gentleman, with his mighty qualifications been suffered so long to lie dormant? And why have we not heard of it before he published it in the public prints?

"He tells me of my poverty; yes, I was poor indeed. Almost immediately after I came to this place I was taken ill, was attended by Drs. Mitchell and Coe, at which time the Doctor modestly attributes my recovery to his medical skill alone, which attention has long since been reciprocated in many other ways. After some length of time I found myself restored, pennyless, destitute of every thing to assist me through the world in my profession, save a lonely lancet; and if my property is to be made by oppressing the poor with extortionate bills, and exacting the last farthing from the widow and the orphan, I hope always to remain poor. It is to me a gratifying reflection, to know, that all the property of friends I have or may yet gain, have been through my own exertion, and I trust merit. Immediately after my recovery, I entered into partnership with Dr. Mitchell, in whose family I resided, where I experienced a kindness and benevolence so peculiar to himself and family.

"He also tells of freely counseling with me. How strange that he should counsel when he was always paid for it; and when he speaks of my popularity seeking slang as being the ear mark of quackery, it is the known fact that quacks are the first to cry *quack*. I should like to know what this is an ear mark of, to tell me he attended on me and my family gratuitiously; as if anything but an empiric, would think his attention on a physician given gratuituously; as if such a thing was ever known, that one physician should charge another, except by one of his own *gizzard*. He next speaks of his medical skill and acquirements. If in this case, as in all others, we judge of his knowledge of the science of medicine by his success (especially in the first settlement of this place), we should think him equal to Death and Doctor Hornbook.[29]

"What can medical men expect, when this pattern of piety would harrass and drive from our community one of its brightest ornaments, a minister of the gospel on the *ground of expediency;* a man whose talents and piety are equalled by few and doubted by none, not even himself were he to adhere to the truth.

"Why had he so frequently obtruded himself upon people, by offering his professional services *unasked, uninvited,* and at the same time knowing that others might be considered their family physicians? And why in consultation, endeavor by his officiousness to take the patient into his own gracious keeping? Is it for the love of gain?

"Does he think I am ignorant of his emissaries running to see my patients, abusing me and my manner of practice, and because he fears being told of it, thinks he will cry thief first?

"Why, in a recent case, did he not have the moral courage to consult in the midst of a distressed family and anxious friends, for the good of an afflicted gentleman, when called upon? But no, he could not suppress the *malignant feeling of his heart,* even to give an opinion unless the case was *wrested* from my hands. In this he met with a *grand defeat.*

"He at length concluded that it was not his intention to injure these gentlemen in their practice (he might have said were it in his power) and with his accustomed hypocrisy, nor 'return evil for evil'. No doubt he will in this case meekly apply to himself the persecution of the saints for righteousness' sake as he formerly did, when he commenced a scene of unfounded misrepresentation against one of the best of men, whose christianity

[28] "Doctors Jabez Purcival, L. F. Sacket, D. Oliver, John Howes and Ezra Ferris, shall be and constitute the first board of medical censors in and for the third medical district." Special Acts passed and published at the second session of the General Assembly of the State of Indiana Held at Corydon on the first Monday in December 1817. By authority Corydon Printed and published by A. & J. Brandon Printers to the State, p. 83. Ch. XXXIII An Act to regulate the practice of Physic and Surgery, approved December 24, 1816.

[29] "Dr. J. F. Merrill, technically a 'Uroscopean' of the school of Burns' 'Dr. Hornbook', was an 'Indian doctor', as he described himself, decorated with the nominal profusion of 'William Kelly Frowhawk Fryer'. He dealt in Indian baths and remedies, and sold Indian nostrums that no Indian ever heard of unless the doctor told him." B. R. Sulgrove, History of Indianapolis and Marion County, 1884, p. 276. *(This note continued on page 702.)*

was proven by his every day walk and conversation, and whose example I would recommend him hereafter to pattern. The Doctor was so kind as to site me to a fable, which compliment I would now return: Some few years since, in an eastern market, a gentleman discovered one of the light fingered gentry taking a fish which did not belong to him—he steps up to him, Sir, I would advise you in future, either to steal a shorter fish or wear a longer jacket. So I would recommend him to disrobe himself, for he has long worn a cloak too short to conceal his cloven foot.

"L. Dunlap."

"Messrs. Editors:[30]

"As the defence of the proceedings of the District Medical Society appears to be given up, as well as any claim to actual license in this state by the gentlemen censors residing in this place, I see little in their communications of last week requiring a reply. Of the claims to something as a substitute for license, that arising from being associated with licensed physicians in a medical society, is about equal to that from a permit to practice for a limited time, granted by favour after refusal to license on examination, of the truth of which last fact I refer to Dr. Clapp of New Albany,[31] then president of the 2nd medical district, as well as to many distinguished citizens of our place, who were at Corydon when the examination was had. As to license elsewhere, although not material to the controversy, if such be the fact in the case claimed from New-York, the first intimation to my recollection that I have had of it is the publication of the gentleman last week. To those who are curious, reference to Judge Harding[32] is given for the fact, from which I supposed the sensibility of the gentlemen who could not make them stick, arose the sound of cups. And if any desire the *truth* as to my course in a *recent consultation,* it may be learnt from the gentlemen present to have been such as is customary with physicians, that I freely gave my opinion as to what ought to be done, but when opposed by the attending physicians, I stated (as every disinterested regular physician will say was correct,) that I would not take the responsibility of its success unless I could direct its execution. In afterwards successfully pursuing in practice, that course they had opposed in consultation, was evinced by the gentlemen in attendance a commendable victory over feelings.

"In reply to a few other insinuations hardly worthy of notice, I will only say, that every man of common intelligence knows I receive no compensation for attention to any of the benevolent societies in operation, and the Colonization Society is the only one having or receiving any funds of which I am *treasurer,* as to which I would refer to the late public report. As the prices for Medical services have been regulated by a rule adopted by the medical society in my absence, by which I have ever since been governed, the intimation that there is any difference in our charges can only be an underbidding for practice, to all the catch-penny credit of which they are welcome. And once for all on that subject, I have to answer, that as we are now separated, I am as willing to leave my services to be valued by my patients as they can possibly be, and pledge myself to shew them at any time to be equally reasonable.

"Isaac Coe."



Dr. Sylvan B. Morris
1795-1843

"Doct. Coe:[33]

"By your request I can state, that being present at the meeting of the Medical Society, Doct. Morris did not deny being notified by you that the society would meet at your house, but that he did not recollect of having been requested to notify others.

"Yours respectfully,

"J. Merrill.[34]

"Indianapolis, June 9th, 1830."

[30] Indiana Journal, Indianapolis, Ind., June 9, 1830, Vol. 8, No. 372, p. 3, c. 3.

[31] Dr. Asahel Clapp was born in Massachusetts, October 5, 1792, and died December 17, 1862. He was the first physician in New Albany, having located there in 1817. He married first Mary Scribner and later the widow of Nathaniel Scribner. He was elected president of the Indiana State Medical Society in 1823. Kemper, Medical History of Indiana, 251; Indiana Magazine of History, Vol. 17, p. 220. Western Censor and Emigrants Guide, Indianapolis, December 15, 1823.

[32] "The widow Harding and several sons came to this place (Indianapolis) in the spring of 1820. Her cabin stood on the bank of the river, on the north side of the ravine, near where the woolen factory of Merritt & Coughlen now stands. Eliakem, Samuel, Israel and Laban were single, and lived with their mother . . . The Hardings were all industrious and energetic farmers." John H. B. Nowland, Early Reminiscences of Indianapolis. Sentinel Book & Job Printing House, Indianapolis, 1870, p. 24. "Eliakin Harding, associate judge of the circuit court April 8, 1822 to December 15, 1826. Resigned." B. R. Sulgrove, History of Indianapolis and Marion County, 1884, 498, 649.

[33] Indiana Journal, Indianapolis, June 9, 1830, Vol. 8, No. 372, p. 3, c. 3.

[34] J. Merrill, alias William Kelly Frowhawk Fryer, Jr., has the following notice in the Indiana Journal, Indianapolis, August 26, 1837, Vol. 14, No. 794: "Indian Doctor—The

"Messrs. Editors:[35]

"In justice to myself I am again compelled to make a few remarks upon certain charges made by Dr. Coe. Although he has taken in considerable sail and appears willing to leave a number of charges unanswered with the get off, of 'not worthy of notice;' yet he still reiterates some things so nauseating to the public, that were it not for the purpose of exposing falsehood, I would let them rest rankling in the breast of their author. As to the horrible story of the cups, on which he has based so much of his skill; and in the last week's paper referred the *curious* to the Hon. Judge Harding for the *truth*, we cheerfully co-operate with the *licentiate* that they should see the judge in person; and to those that are not so *curious* we refer to the certificate below.* Hereafter I have no doubt but the very sound of the cups will produce unhappy associations in his mind. Again he has made a statement which might be braced with the cup story, concerning the 'recent case'. I can assert and substantiate the fact by a number of gentlemen present, that his conduct at that time was unbecoming a physician, nor according to their custom; and was both insulting and equivocating, changing his opinion within the space of a few minutes. He also states that 'in afterwards successfully pursuing in practice, that course they had opposed in consultation'. Any person whom it may or ought to concern can be convinced of the falsity of this assertion.

"In relation to medical charges I am compelled to say that I believe he was the first man to propose a standard for medical charges, and assisted in the arrangement; and how near he has adhered to them I shall not pretend to say: and if he would draw a line of distinction between a man who takes an independent course, and one who begs business, the epithet of catch-penny might fall upon the head of him who most deserves it.

"Were I to claim any thing by being associated in the same society with the *Licentiate*, it would be but paying homage to that to which truth and honour are strangers.

"The only apology I have for troubling the public with matter so uninteresting to them is, that I deem it every man's duty to defend his character and motives when assailed, in such a manner as that the public may have an opportunity of forming correct conclusions.

"L. Dunlap."

"* I do hereby certify, that in the year 1821, during my illness I was cupped by Isaac Coe, and that Dr. Mitchell or Dr. Dunlap never to my knowledge brought to my house any cupping instruments; nor did either of those gentlemen ever cup or attempt to cup me or any other person as I know of. Dr. Coe made his charge, which I paid him.

"Eliakim Harding."

"Communications[36]

"To the Public:

"It will be recollected that in a former communication I stated, that Dr. Morris denied being notified by Dr. Coe to appear at his house to attend the meeting of the society, and in consequence of this statement a certificate was had from one Joseph Merrill to *prove* that Dr. Morris did not deny being notified. I now refer to the communication of Dr. Morris himself.

"L. Dunlap."

"On the morning of the 3d of May last, the day appointed for the meeting of the Central Medical Society of Indiana, I was standing in front of Messrs. Yandes' and Porters' store, as Doctor Coe came along: and after the usual salutations, I enquired the hour and place of the meeting of said society. He replied, that he supposed we might meet at his house or in one of Mr. Henderson's rooms. He said something about meeting at 10 o'clock; I urged that we should meet at as early an hour as possible, as I wished to return home that afternoon. The Doctor appeared in a hurry and passed on, leaving me entirely undetermined respecting the place or hour of the meeting.

"I then concluded to remain at the same place or in front of Mr. Henderson's, where I should probably observe the physicians as they might be passing, and the time and place of meeting be determined upon. In the course of an hour, while standing on Mr. H's pavement, I observed several physicians (six or eight) coming up the street. They called me, and joining them immediately

undersigned takes this method of informing the citizens of Indianapolis, Indiana, that he has recently located himself in the place where he anticipates to practice medicine for a term of years hence, and he offers his professional aid to the citizens in its vicinity. His office is on Main Street, in a small frame building near the cabinet shop of Mr. Fleming T. Luse, where he can be found at all times in the day unless absent on professional business, and he hopes by strict attention to his business which shall be his felicity to give ultimate satisfaction to all whom he may have concern with.

"His medicines are principally derived from the vegetable kingdom and have proved eminently useful in the cure of consumption, liver complaint, dyspepsia, dropsy, rheumatism, affection of the kidneys, and all other diseases of the blood and nervous system, female weakness, etc. Also fever, fever and Ague, flux, summer complaint among children, Cholera, and Cholera morbus, with many other diseases with which the human family are afflicted. All persons applying of inward diseases are requested to bring or send their urine of that ejected of morning. W. K. F. Fryer, Jr.

"N. B. Cash will be expected for all medicine prescribed for patients at the office, as I have come to an ultimate conclusion to not sell my medicine on credit, and as such they can be had on reasonable terms for cash. Persons wishing their teeth extracted, can be accommodated at this office, charges shall be moderate."

[35] Indiana Journal, Indianapolis, June 16, 1830, Vol. 8, No. 373, p. 3, c. 2.

[36] Indiana Journal, Indianapolis, Ind., June 23, 1830, Vol. 8, No. 374, p. 2, c. 4. Indiana Democrat, and State Gazette, Indianapolis, Indiana. Vol. I, No. 13. June 24, 1830, p. 3, c. 2.

without making any enquiries, I went with them up a back stair way into the 'grocery loft' or 'French school room'.

"Afterwards when Doctor Coe came into the 'room' or 'loft', he stated among other things, that he had appointed the meeting at his house at 10 o'clock, and had notified Dr. Morris accordingly, and that he had requested him to notify others. I rose immediately, and in the presence of the society, stated that Dr. Coe left me in the morning undetermined respecting the place and hour of the meeting; and that he did not notify me that the society would meet at his house, nor did he request me to notify others. The Doctor stood corrected; or at least he neither affirmed or denied.

"Yours respectfully,
"Sylvan B. Morris,
"Shelbyville, Ind., June 15, 1830."

"Messrs. Editors:[37]

"I have certainly no wish to continue a personal controversy with either Drs. Mitchell or Dunlap, and should not have troubled the public with any reply to Dr. Dunlap's last communication, had not he obtained from Judge Harding a certificate to disprove a fact of little consequence in itself, but which in reply to Dr. Mitchell I had incidentally stated.

"Conscious of the truth of my statement, when Dr. Mitchell denied it, I referred to Judge Harding,[38] without having consulted him, but from information since obtained of the manner in which the disease affected him it is by no means improbable that he may have forgotten the circumstances of the cupping. But when it is recollected, as will not be denied, that Doctors Mitchell and Dunlap were the attending physicians, that I never saw him but once, and then was called in not to consult, but only to cup him and only charged for cupping, the irresistible conclusion must be that I was called in to do it because they could not, and not from any delicacy on their part in borrowing my cups, being in the constant habit of using my other instruments; and it is not very probable that after borrowing the cups they would have called for my assistance until both had used their utmost efforts to succeed. The fact was, Dr. Dunlap borrowed my cups as he said to cup Eliakim Harding's head, and next morning after my passing the widow Harding's Dr. Dunlap came after me and requested me to come and cup their patient's head as they could not make the cups stick. I did so and found Dr. Mitchell there, and Mr. Harding's head partly shaved and scarified.

"The certificate below needs no comment but will be amply substantiated if denied.

"As to the recent consultation, etc., as Dr. Dunlap admits my statements to be as true as that with respect to the cupping, I willingly coincide with him in leaving the whole matter to stand on the same basis.

"Isaac Coe.

"I hereby certify that I was at the widow Harding's one morning at the time Eliakim Harding was sick in the fall of 1821, and that while I was there Dr. Dunlap came in and took out some cups which I knew by the bag in which they were contained to be Dr. Coe's, and Dr. Dunlap said he had brought them to cup Mr. Harding believing it would help his head, but before he began to cup him I went to Robert Harding's whose wife was sick, and while there Dr. Dunlap came in and said he did not know what was the reason but he could not make the cups stick and would go for Dr. Coe himself. And that after going to see Mr. Davis' sick child I returned to the widow Harding's and found Dr. Mitchell, Dr. Dunlap and Dr. Coe there, and Dr. Coe was cupping Judge Harding's head. And I recollect that while at Mr. Davis', I said that Dr. Dunlap had brought Dr. Coe's cups to Mr. Harding's.

"June 17, 1830. Sophia Essary.[39]
(Copy)

"To the Public[40]

"Dr. Coe has referred the public to the testimony of Judge Harding on the subject of the cups—Judge Harding has given his testimony and Dr. Coe is left laboring under the imputation of having stated a falsehood. He feels his discomfiture, and as a never failing expedient, has procured a witness who was ready to testify to the utmost of his desires. It is passing strange that a family of so extensive connection as Judge Harding's should not have the most distant recollection of such a wonderful matter.

"I now leave the Dr. to the full enjoyment of all the pleasant reflection this mighty contest may bring to his tenacious memory.

"L. Dunlap."

"We[41] have decided to publish nothing more in relation to the personal controversy between the Doctors. Having published for both sides last week, an opportunity is thus afforded, of which we avail ourselves, with pleasure, to put an end to the controversy, at least in our columns, without doing injustice to either party. We submitted to the pub-

(Continued on page 702)

[37] Indiana Journal, Indianapolis, Ind., June 23, 1830, Vol. 8, No. 374, p. 2, c. 4. Indiana Democrat and State Gazette, Vol. I, No. 13, June 24, 1830, p. 3, c. 2.

[38] The Harding family, from Washington county, Ky., were among the earliest emigrants to Marion county. Robert and Martha Harding, both natives of Pennsylvania, and emigrants to Kentucky were married about the close of the Revolutionary war, and became the parents of twelve children, among them Eliakem Harding. B. R. Sulgrove, History of Indianapolis and Marion County, 1884, 649.

[39] Sophia Essary, born in Pennsylvania, was the wife of John Essary, a lawyer, who operated Ballenger's saw-mill on Fall Creek, near where Millersville now is, from 1826 to 1832. B. R. Sulgrove, History of Indianapolis and Marion County, 1884, p. 639.

[40] Indiana Democrat, and State Gazette, Vol. I, Indianapolis, Ind., Vol. I, No. 13, June 24, 1830, p. 3, c. 2.

[41] Indiana Journal, Indianapolis, Ind., June 30, 1830, Vol. 8, No. 375, p. 3, c. 3.

1935 MEMBERS OF THE INDIANA STATE MEDICAL ASSOCIATION

The following list of members of the Indiana State Medical Association is published primarily for the purpose of detecting errors. It includes the names of those who were members on November 15, 1935. Membership established after that date could not be included in the December JOURNAL.

Members are listed under the counties wherein they reside; if membership is held in another county, a note to that effect follows the name of the member.

Names of members who have died during the year do not appear on this list.

The letter (H) appearing before a name indicates that the physician is an honorary member.

If any errors are found, kindly report them to THE JOURNAL, 1021 Hume Mansur Building, Indianapolis. Your cooperation will be appreciated.

ADAMS COUNTY

Berne

Ernest Franz
Myron Habegger
D. D. Jones
H. O. Jones
Amos Reusser

Decatur

S. D. Beavers
Palmer Eicher
Ben Duke
F. L. Grandstaff
G. J. Kohne
J. M. Miller
C. C. Rayl
W. E. Smith

Preble

J. C. Grandstaff

Geneva

C. P. Hinchman
C. R. Price

Monroe

Geo. S. Silliman

ALLEN COUNTY

Fort Wayne

J. R. Adams
Harry Aldrich
Paul P. Bailey
A. C. Bartholomew
Karl Beierlein
D. R. Benninghoff
Raymond Berghoff
J. E. Bickel
H. V. Blosser
Theo. R. Borders
G. T. Bowers
J. W. Bowers
H. O. Bruggeman
Doster Buckner
E. L. Bulson
Elizabeth Burns
D. F. Cameron
W. W. Carey
Ernest R. Carlo
E. L. Cartwright
M. B. Catlett
H. R. Chester
W. R. Clark
John E. Conley
Charles J. Cooney
Beaumont S. Cornell
C. R. Dancer
E. F. DeVaux
I. W. Ditton
M. H. Draper
A. H. Duemling
W. W. Duemling
K. C. Eberly
B. M. Edlavitch
L. W. Elston
Ralph W. Elston
W. F. Engelbert
(H) C. H. English
A. N. Ferguson
A. M. Fichman
Milton H. Firestone
H. W. Foy
H. W. Garton
W. F. Gessler
H. E. Glock
L. K. Gould
A. F. Hall
Allen Hamilton
R. L. Hane
K. C. Hardesty
L. P. Harshman
Harry C. Harvey
Morse Harrod
A. P. Hattendorf
Ruth M. Hoetzer
Jay F. Havice
S. P. Hoffman
Don D. Johnston
J. W. Kannel
O. T. Kidder
E. A. King
E. H. Kruse
W. E. Kruse
J. C. Lill
Maurice Lohman
A. H. Macbeth
Bertha G. Macbeth
Harriet Macbeth
J. E. McArdle
(H) G. W. McCaskey
G. A. McDowell
R. B. McKeeman
Edgar Mendenhall
A. L. Mikesell
Carl G. Miller
O. J. Miller
Richard Miller
C. F. Moats
G. E. Moats
Arthur E. Moravec
H. L. Murdock
Elmer W. Nahrwold
Carroll O'Rourke
C. B. Parker
M. F. Porter
Nelson H. Prentiss
Henry Ranke
Lyman T. Rawles
H. A. Ray
B. W. Rhamy
W. B. Rice
Noah Allen Rockey
Juan Rodriguez
M. I. Rosenthal
D. L. Rossiter
C. J. Rothschild
Harry W. Salon
N. L. Salon
A. R. Savage
D. W. Schafer
E. M. Schellhouse
M. F. Schick
Ed. H. Schlegel
Herbert Sensenv
Lawrence Shinabery
John Short
E. C. Singer
J. S. Skobba
Claude E. Skomp
H. Brooks Smith
E. D. Smith
L. E. Somers
A. J. Sparks
John Swanson
Walter Thornton
Phillip S. Titus
E. M. Van Buskirk
Budd Van Sweringen
Metodi Velkoff
J. C. Wallace
S. G. Welty
Kathryn Whitten
Robt. W. Wilkins
Irving H. Willet
A. C. Worley
W. C. Wright
(H) A. R. Wyatt
Jas. L. Wyatt
Noah Zehr

New Haven

J. C. Cowan
C. W. Dahling
G. A. Smith

Monroeville

S. E. Mentzer
H. E. Steinman

Woodburn

Edward Moser

BARTHOLOMEW COUNTY

Columbus

F. J. Beck
J. W. Benham
Bertha A. Clouse
Walter S. Fisher
P. C. Graham
William L. Green
J. K. Hawes
H. H. Kamman
A. M. Kirkpatrick
Maurice McKain
H. J. Norton
Wm. J. Norton
Lyman Overshiner
Richard K. Schmitt
Lotta R. A. Suverkrup
Dorothy D. Teal
Everett W. Williams
E. U. Wood
Omer Wooldridge

Hope

Gordon H. Haggard
L. D. Reed

Elizabethtown

O. A. DeLong
Claud M. Jackson

Hartsville

Marvin E. Hawes

BENTON COUNTY

Boswell

C. W. Atkinson
O. M. Flack
H. H. Hubbard

Fowler

W. H. Altier
D. E. Mavity
Verne L. Turley

Oxford

H. G. Bloom
E. E. Parker
Virgil Scheurich

Earl Park

C. T. Bundy
Thomas Keefe

Otterbein

M. S. King
J. E. McCabe

Ambia

W. H. Taylor

BOONE COUNTY

Lebanon

Robert S. Ball
H. A. Beck
John D. Coons
O. C. Higgins
C. G. Kern
John R. Porter
E. A. Rainey
Wm. H. Spieth
Wm. H. Williams

Zionsville

L. S. Bailey
O. E. Brendel
E. D. Johns

Thorntown

Clancy Bassett

Whitestown

R. J. Harvey

Jamestown

Francis Riley
Alvin Schaaf
member Montgomery Co.

CARROLL COUNTY

Camden

Chas. Kennedy
Eva Kennedy
Charles Wise

Delphi

George D. Beamer
C. E. Carney
A. C. Clauser
C. C. Crampton
Hubert Gros
W. R. Quick

Flora

E. H. Brubaker
Andrew J. Cook
T. A. Kearns
T. D. Peters
Morris Thomas

Bringhurst

Emerson Carter

Burlington

J. R. McLaughlin

Burrows

E. D. Wagoner

Deer Creek

A. G. Moore

Rockfield

H. Y. Mullin

CASS COUNTY

Logansport

C. A. Ballard
W. E. Barnett
J. H. Barnfield
J. C. Bradfield
Thomas Cooper
John Davis
B. W. Egan
Clara S. Eirley
J. L. Gilbert
E. L. Hedde
C. C. Hickman
W. R. Hickman
Marian Hochhalter
W. A. Holloway
W. W. Holmes
J. A. Little
J. B. Maxwell
C. H. McCully
M. A. McDowell, member Miami Co.
Earl Palmer
J. H. Reed
Joseph Rubsam
Foss Schenck
Harry Shultz
H. G. Steinmetz
J. W. Stewart
Milton B. Stewart
F. W. Terflinger
Charles L. Viney
C. L. Williams
Paul D. Williams, member Tippecanoe Co.
P. H. Wilson

Galveston

C. T. Dutchess

Walton

E. P. Flanagan
E. A. Spohn

New Waverly

A. E. Graves

Royal Center

D. R. Ivey
Walter McBeth
H. D. Tripp

Twelve Mile

Donald L. Miller

CLARK COUNTY

Jeffersonville

Samuel L. Adair
J. H. Baldwin
Ralph Bruner
E. P. Buckley
Austin Funk
C. F. C. Hancock
Nathaniel C. Isler
H. H. Reeder
H. R. Wilber
W. M. Varble

Sellersburg

Samuel S. Foss
A. C. Vandevert

Charlestown

T. J. Marshall

Clarksville

T. M. Smith

New Washington

R. S. Taggart

Henryville

Houston W. Shaw

CLAY COUNTY

Brazil

Fred C. Dilley
J. L. Lambert
J. F. Maurer
(H) Frederick Nussell
John C. Shattuck
C. C. Sourwine

Clay City

Walter Bond
L. C. Rentschler

Staunton

P. H. Veach

Coalmont

H. H. Ward

CLINTON COUNTY

Frankfort

F. A. Beardsley
M. F. Boulden
C. A. Burroughs
A. G. Chittick
C. B. Compton
T. A. Dykhuizen
Alexander Hamilton
R. A. Hedgecock
J. M. Johnson
M. T. McCarty
C. A. Robison
Hollace R. Royster
S. B. Sims
J. A. Van Kirk
B. A. Work

Mulberry

Nelson B. Combs
J. A. Kent

Forest

F. P. AuBuchon

Sedalia

Ivan E. Carlyle

Rossville

John S. Ketcham

Boyleston

F. N. Thorpe

CRAWFORD COUNTY

English

N. E. Gobbel
G. B. Hammond

Milltown

Jess J. Johnson

DAVIESS-MARTIN COUNTY

Loogootee

Wm. Gilkison
J. F. Michaels
J. W. Strange

Odon

I. E. Bowman
Jerome DeMotte

Shoals

George M. Freeman
J. S. Gilkison
E. E. Long

Washington

N. Maude Arthur
B. O. Burress
C. P. Fox
R. L. Kleindorfer
H. B. Lindsay
Wm. O. McKittrick
S. L. McPherson
A. A. Rang
E. Brayton Smoot
H. C. Wadsworth

Montgomery

Douglas Hart

Burns City

T. A. Hays

Elnora

Mac Guyer Porter

Plainville

D. H. Swan

DEARBORN-OHIO COUNTY

Aurora

Wm. F. Duncan
J. M. Jackson
C. W. Olcott
O. H. Stewart
James F. Treon
E. R. Wallace

Lawrenceburg

A. T. Fagaly
Wm. J. Fagaly
Edwin L. Libbert
J. M. Pfeifer
G. F. Smith

Rising Sun

Geo. H. Hansell

Dillsboro

Frank Downey

Guilford

John C. Elliott

DECATUR COUNTY

Greensburg
P. C. Bentle
W. C. Callaghan
H. S. McKee
C. C. Morrison
J. T. Morrison
Charles Overpeck
E. T. Riley
I. M. Sanders
W. E. Thomas
(H) B. S. White

Letts
D. D. Dickson

Millhousen
William Herr

Westport
E. A. Porter
Chas. Wood

Adams
M. A. Tremain

St. Paul
W. R. Turner

DEKALB COUNTY

Auburn
H. M. Covell
L. N. Geisinger
A. V. Hines
D. M. Hines
Harold Nugen
J. A. Sanders
Bonnell M. Souder
C. S. Stewart
Willard W. Swarts

Butler
Clayton B. Hathaway
Joseph Murphy member Allen Co.
W. F. Shumaker
Chas. Weirich

Garrett
J. A. Clevenger
M. E. Klingler
M. O. Klingler
R. A. Nason
D. M. Reynolds
W. G. Symon
J. W. Thomson

Waterloo
E. A. Ish
J. E. Showalter
J. P. Showalter

DELAWARE-BLACKFORD COUNTY

Eaton
(H) G. F. Ames
J. M. Atkinson
O. A. Hall
(H) T. J. Mansfield

Hartford City
Wendell W. Ayres
Geo. H. Dando
L. E. Werry

Montpelier
T. J. McKean, member Adams Co.
F. M. Reynolds, member Wells Co.

Muncie
Clay A. Ball
Roscoe H. Beeson
Henry E. Bibler
Clarence L. Boek
E. V. Boram
Chas. L. Botkin
John H. Bowles
Karl T. Brown
E. H. Clauser
J. H. Clevenger
R. E. Cole
Nila Covalt
Donald D. Covalt
(H) H. A. Cowing
Elmer T. Cure
E. C. Davis
O. M. Deardorff
J. Frank Downing
F. W. Dunn
F. E. Hill
Howard E. Hill
Anson G. Hurley
S. G. Jump
A. T. Kemper
F. E. Kirshman
Jules La Duron
C. A. Leatherman
L. R. Mason
C. E. Miller
W. J. Molloy
Lall G. Montgomery
Paul D. Moore
W. C. Moore
Jean Morris
Thos. R. Owens
Wm. J. Quick
A. C. Rettig
Shelton G. Silverburg
J. C. Silvers
J. M. Silvers
O. E. Spurgeon
(H) W. A. Spurgeon
C. J. Stover
E. F. Tindal
(H) I. N. Trent
Elaine Valskamp
L. O. Walters
John H. Williams
Amelia T. Wood
Gerald S. Young

Daleville
J. R. Hurley
O. Arnold Tucker

Gaston
Fred Langsdon

Albany
K. E. Puterbaugh

Yorktown
C. H. Wright

DUBOIS COUNTY

Huntingburg
W. D. Bretz
E. G. Lukemeyer
L. C. Lukemeyer
H. C. Knapp
S. L. McKinney
E. F. Steinkamp
Harvey Stork

Jasper
Paul J. Blessinger
St. John Lukemeyer
Leo A. Salb
C. O. Schoier

Ferdinand
H. G. Baeker
A. F. Gugsell

Ireland
L. B. Johnson

ELKHART COUNTY

Elkhart
G. E. Bowdoin
R. A. Bowman
Fred N. Dewey
L. A. Elliott
C. F. Fleming
J. C. Fleming
Justus M. Fleming
Geo. W. Grossniekle
C. W. Haywood
A. W. Hull
M. F. Hunn
Arthur W. Kistner
John W. Kistner
Elmer G. Koehler
Benj. F. Kuhn
Fred A. Lampman
W. C. Landis
Milo O. Lundt
I. J. Markel
H. N. McKee
S. T. Miller
Allen A. Norris
G. B. Patrick
H. C. Schlosser
M. Maywood Sears
I. Wright Short
Walter A. Stauffer
Hannah O. Staufft
R. B. Stout
L. Forest Swank
L. F. Swihart
D. D. Todd
K. W. Vetter
S. C. Wagner
Jas. A. Work

Goshen
E. E. Ash
Cecil K. Bender
H. P. Bowser
Henry W. Eby
F. M. Freeman
W. R. Kelly
Herbert K. Lemon
L. H. Simmons
H. E. Vanderbogart
Albert C. Yoder
Ralph H. Young

Middlebury
M. A. Farver
Melvin Teters

Nappanee
Henry Defrees
R. A. Fleetwood
Melvin D. Price
Willard A. Price
J. S. Slabaugh
Lotus M. Slabaugh

Wakarusa
Chas. L. Amick
F. I. Eicher

Bristol
S. S. Frybarger

New Paris
E. D. Stuckman

FAYETTE-FRANKLIN COUNTY

Brookville
E. M. Glaser
H. R. Hoeger
John W. Lucas
Ralph Sappenfield
H. N. Smith

Connersville
L. N. Ashworth
Irvin E. Booher
Jediah H. Clark
R. H. Elliott
Stanley Gordin
Stanton E. Gordin
Albert F. Gregg
J. S. Leffel
H. C. Metcalf
R. D. Morrow
David G. Pugh, member Wayne-Union Co.
H. W. Smelser
F. J. Spilman

Everton
O. E. Dale

Laurel
S. A. Gifford

Oldenburg
George Obery

FLOYD COUNTY

New Albany
James W. Baxter
J. W. Baxter, Jr.
S. M. Baxter
J. E. Bird
C. E. Briscoe
D. F. Davis
Parvin Davis
Geo. H. Day
W. F. Edwards
W. H. Garner
John P. Gentile
W. A. Hall
R. W. Harris
A. P. Hauss
Chas. P. Leuthart
Anna McKamy
(H) Wm. Moore
P. R. Pierson
A. N. Robertson
S. T. Rogers
Carl P. Schoen
P. H. Schoen
H. B. Shaeklett
(H) W. L. Starr
F. T. Tyler
Harry Voyles
Amzi Weaver
Wm. W. Weaver
W. C. Winstandley
M. F. Wolfe
John T. Wray

Georgetown
H. K. Engleman

Galena
E. L. Sigmon

FOUNTAIN-WARREN COUNTY

Attica
J. Roy Burlington
James C. Freed
Albert C. Holley
A. R. Kerr

Covington
J. W. Aldridge
Earl E. Johnson
Simeon Lambright
Alva Spinning

Kingman
A. L. Rateliff
B. J. Smith

Williamsport
S. S. DeLancey
G. S. Porter
T. E. Ward, member Tippecanoe Co.

Hillsboro
E. G. Bounell

Pine Village
Geo. W. Dewey, member Tippecanoe Co.

West Lebanon
W. W. Heald
Richard Stephenson

Veedersburg
C. B. McCord

Wallace
Hubert M. Rusk

FULTON COUNTY

Rochester
M. O. King
M. E. Leekrone
H. W. Markley
Mark M. Piper
C. L. Richardson
Dean K. Stinson

Fulton
F. C. Dielman

Akron
C. L. Herrick

Kewanna
L. E. Kelsey

Grasscreek
J. E. Saunders

Athens
A. E. Stinson

GIBSON COUNTY

Haubstadt
Austin F. Marchand
Edwin V. Marchand
V. H. Marchand
Harold G. Petitjean

Oakland City
C. M. Clark
J. W. McGowan
E. R. Ropp
R. W. Wood

Owensville
G. B. Beresford
J. R. Montgomery
Karl S. Striekland

Princeton
H. H. Alexander
O. T. Brazelton
Orville M. Graves
Virgil McCarty
Chas. A. Miller
J. L. Morris
A. H. Rhodes
W. B. Wood
A. L. Ziliak

Hazleton
H. M. Arthur

Patoka
M. L. Arthur
S. I. Arthur

Fort Branch
B. C. Gwaltney

GRANT COUNTY

Fairmount
Z. T. Hawkins
Glenn Henley
L. D. Holliday

Marion
W. T. Bailey
Thomas M. Barrett
Robert F. Braunlin
W. H. Braunlin
Robert McD. Brown
V. V. Cameron
B. C. Dale
E. O. Daniels
G. R. Daniels
A. T. Davis
M. S. Davis
G. G. Eckhart
L. H. Eshleman
W. A. Fankboner
Pierre J. Fisher
H. R. Goldthwaite
E. O. Harrold
A. D. Huff
George H. Ingram
E. F. Jones
R. W. Lavengood
Ralph E. LeMaster
M. J. Lewis
Harold E. List
J. F. Loomis
Eleanor McIlwain
Robert McIlwain
J. D. McKay
H. A. Miller
C. J. Overman
Nettie B. Powell
G. G. Richardson
E. M. Trook
J. C. Vaughan
Samuel Weinberg

Jonesboro
Russell Baskett
J. A. Ritchey

Van Buren
M. L. Bridge
John E. Derbyshire

Gas City
(H) L. H. Conley
Leon J. Garrison

Swayzee
P. C. King
Wm. S. Resoner

Upland
E. C. Taylor

GREENE COUNTY

Bloomfield
King L. Hull
Mathias S. Mount
H. B. Turner
F. A. VanSandt

Linton
Frank A. Bailey
P. C. Berns
W. F. Craft
C. C. Hamilton
Geo. C. Porter
B. B. Raney

Worthington
J. W. Clifford
George E. Moses

Newberry
Luther Hamilton

Jasonville
Carl M. Porter
Sam Rotman

Lyons
J. S. Simons

HAMILTON COUNTY

Carmel
Ross A. Cooper
C. M. Donahue

Cicero
E. D. Havens
Russell E. Havens
C. H. Tomlinson

Noblesville
W. E. Catterson
J. E. Hanna
R. F. Harris
Sam W. Hooke
H. C. Kraft
O. B. Pettijohn
Ray W. Shanks
J. D. Sturdevant

Sheridan
I. W. Davenport
C. R. Elfers, member Dearborn-Ohio Co.
J. W. Griffith
A. C. Newby
J. L. Reek
E. M. Young

Westfield
Andrew F. Connoy
(H) Z. H. Fodrea

Arcadia
Frank Rodenbeck

HANCOCK COUNTY

Fortville
Jas. B. Ellingwood
Jesse E. Ferrell
Samuel W. Hervey
Stewart Sloeum

Greenfield
J. L. Allen
Ralph N. Arnold
C. H. Bruner
Chas. Milo Gibbs
Oscar Heller
R. E. Kinneman
L. B. Rariden
James R. Woods

New Palestine
W. H. Larrabee
E. E. Maee

Wilkinson
E. R. Gibbs
Charles Titus

Charlottesville
W. R. Johnston

HARRISON COUNTY

Corydon
W. E. Amy
F. M. Applegate, member Floyd Co.

Crandall
G. D. Baker

Elizabeth
Fred Bierly, member Floyd Co.

Ramsey
L. F. Glenn

Mauckport
Alfred Mathys

Palmyra
Frank May, member Washington Co.

Lanesville
E. W. Murphy

HENDRICKS COUNTY

Brownsburg
Lloyd E. Foltz
A. N. Seudder

Danville
L. W. Armstrong
Mount E. Frantz
J. H. Grimes
(H) W. T. Lawson
C. B. Parker

Plainfield
Milo M. Aiken
J. C. Stafford
C. B. Thomas

Coatesville
W. J. Fuson
C. F. Hope, member Monroe Co.

Clayton
Rilus E. Jones

North Salem
E. Ray Royer
Robert Wiseheart

Pittsboro
O. T. Seramahorn
W. H. Terrell

HENRY COUNTY

Knightstown
J. Leo Bartle
E. B. Call
O. H. Rees
Floyd N. Roberts
John Ivan Waller

Middletown
R. D. Arford
F. Dragoo, member Madison Co.
Joseph H. Stamper

Newcastle
R. L. Amos
C. C. Bitler
C. E. Canaday
W. J. Dieter
E. S. Ferris
B. L. Harrison
W. C. Heilman
G. E. Iterman
W. U. Kennedy
E. E. Kirk
H. H. Koons
H. W. McDonald
C. F. Sexauer
Robert A. Smith
Walter M. Stout
C. E. Thorne
J. A. Tully
W. C. Van Nuys
Edison Karl
D. S. Wiggins
George Wiggins
W. W. Wright

Lewisville
C. E. Davis

Mt. Summit
L. C. Marshall

Blountsville
Paul Marsh

Spiceland
W. S. Robertson

Shirley
Ralph Wilson

HOWARD COUNTY

Kokomo
C. J. Adams
E. N. Bennett
Elton R. Clarke
R. A. Craig
F. S. Cuthbert
G. N. Druley
P. W. Ferry
H. G. Grable
W. H. Harrison
O. D. Hutto
L. R. Knepple
E. F. Kratzer, member Miami Co.
B. D. Lung
R. E. McIndoo
Wilbur J. Marshall
Will J. Martin
J. A. Meiner
D. A. Morrison
W. R. Morrison
F. N. Murray
F. M. Olmstead
L. M. Reagan
H. M. Rhorer
R. P. Schuler
R. F. Scott
W. I. Scott
E. M. Shenk
Jesse S. Spangler

Russiaville
R. M. Evans
Carl B. Southard

Greentown
W. W. Gipe

HUNTINGTON COUNTY

Huntington

D. D. Bowers
Harold S. Brubaker
Stanley M. Cascy
A. C. Chenoweth
Myers B. Deems
M. G. Erehart
J. B. Eviston
(H) Reuben F. Frost
R. S. Galbreath
(H) B. H. B. Grayston
F. W. Grayston
Wallace S. Grayston
J. M. Hicks
R. G. Johnston
Robert Meiser
F. B. Mitman
Grover Nie
G. G. Wimmer

Markle

A. H. Northrup
Walter H. Vance

Roanoke

O. P. Bigelow

Bippus

Joy F. Buckner
member Marion Co.
R. V. Carpenter

Warren

Claude S. Black
L. W. Smith

JACKSON COUNTY

Crothersville

Wm. K. Adair
P. A. Kendall

Seymour

C. E. Gillespie
Harold P. Graessle
G. H. Kamman
Guy Martin
Louis H. Osterman
D. L. Perriu
E. D. Wright

Brownstown

Chas. L. Ackerman

Freetown

T. E. Conner
George M. Young,
member Marion Co.

Ewing

D. J. Cummings

Cortland

J. M. Jenkius

Medora

Neal Matlock

JASPER-NEWTON COUNTY

Goodland

C. C. Bassett
Frank Kennedy
J. G. Kinneman

Kentland

O. E. Glick
W. C. Mathews
G. H. VanKirk

Morocco

G. D. Larrison
L. H. Recher

Rensselaer

C. E. Johnson
M. D. Gwin
Harry English
A. R. Kresler

Remington

A. P. Rainier

Lake Village

Raymond Merchant,
member Lake Co.

JAY COUNTY

Dunkirk

E. C. Garber
E. H. Hall, member
Delaware-Blackford
Co.
Don P. Murray

Portland

A. C. Badders
George Cring
Forrest Keeling
Mark M. Moran
Florence Lyons
J. E. Nixon
C. A. Paddock
G. L. Perry
W. D. Schwartz
B. M. Taylor

Pennville

H. J. Hiestand

Salamonia

J. J. Kidder

Redkey

John Lansford

JEFFERSON COUNTY

Madison

A. G. W. Childs
E. C. Cook
Chas. W. Denny
F. C. Denny
G. E. Denny
Anna Goss
N. A. Kremer
W. R. Mathews
George A. May
W. A. Shuck
E. C. Totten
Oscar A. Turner
S. A. Whitsitt

North Madison

C. C. Copeland
G. A. Estel
Guy W. Hamilton
James W. Milligan
Francis Prenatt

Hanover

William B. Adams
Carl Henning

JENNINGS COUNTY

North Vernon

John H. Green
W. L. Grossman
D. W. Matthews
D. L. McAuliffe
W. H. Stemm

Butlerville

William Allee Sandy

Scipio

W. L. Wilson

JOHNSON COUNTY

Franklin

Harry Murphy
Walter L. Portteus
O. A. Province
R. C. Wilson

Edinburg

J. V. Baker

Whiteland

D. L. Phipps

Greenwood

C. E. Woodcock

KNOX COUNTY

Bicknell

Maurice S. Fox
R. H. Fox
E. H. Tade
Guy Wilson

Vincennes

E. W. Beckes
N. E. Beckes
C. L. Boyd
S. L. Carson
R. B. Cochran
M. L. Curtner
E. T. Edwards
V. A. Funk
L. L. Gilmore
J. M. Goldman
B. B. Griffith
H. W. Held
M. H. C. Johnson
J. G. Jones
U. G. Kelso
A. B. Knapp
H. D. McCormick
R. G. Moore
S. A. Prather
J. P. Ramsay
James F. Reilly
D. H. Richards
C. E. Stewart

Decker

Loren Hoover
E. F. Small

Freedlandville

M. C. McDowell

Edwardsport

(H) J. L. Reeve
J. A. Scudder

KOSCIUSKO COUNTY

Mentone

T. J. Clutter
G. C. Taylor
M. G. Yocum

Pierceton

G. N. Herring
T. S. Schuldt

Silver Lake

Ira Leckrone

Syracuse

Fred O. Clark
C. R. Hoy

Warsaw

G. W. Anglin
J. R. Baum
C. C. Dubois
C. Norman Howard
A. C. McDonald
S. C. Murphy
O. H. Richer
W. Bert Siders

Claypool

H. F. Steele

Leesburg

C. E. Thomas
Everett W. Thomas

LAGRANGE COUNTY

Lagrange

H. G. Erwin
H. W. Schrock
C. H. Schultz

Wolcottville

C. F. Kercheval
J. M. Kercheval
B. H. Pulskamp,
member Noble Co.

Topeka

W. O. Hildebrand
F. M. Nichols

Howe

A. A. Wade
F. C. Wade

Shipshewana

E. H. Wagenaar,
member Elkhart Co.

LAKE COUNTY

Crown Point

A. H. Farley
D. E. Gray
W. F. Houk
J. W. Iddings
J. O. Parramore
C. R. Pettibone
R. R. Tracht
William D. Weis

East Chicago

G. F. Bicknell
F. F. Boys
A. V. Cole
Thos. F. Cotter
P. H. Dietrich
Chas. J. Doneghy
H. C. Ernst
M. A. Given
R. C. Hamilton
D. R. Johns
Lazar Josif
J. E. Komoroske
E. L. Levin
R. J. Liehr
Ora L. Marks
D. F. McGuire
J. S. Niblick
C. C. Robinson
A. A. Ross
A. G. Schlieker
Paul B. Smith
Robert Spear
J. A. Teegarden
Hugh A. Vore
A. L. Yoder

Gary

W. P. Alexander
C. O. Almquist
George D. Anthoulis
Bellfield Atcheson
H. M. Baitinger
W. M. Behn
C. H. Bendler
S. R. Best
L. F. Bills
Robt. N. Bills
S. R. Blackwell
Carl Boardman
C. C. Brink
J. B. Burcham
G. G. Campbell
J. J. Chevigny
G. E. Comstock
J. A. Craig
S. H. Crossland
L. J. Danieleski
C. A. DeLong
M. H. Derian
A. J. Dian
Flavia M. Doty
J. R. Doty
J. S. Duncan
H. M. English
E. E. Evans
E. C Gaebe
G. W. Gannon
E. E. Geisel
Antonio Giorgi
Joseph Goldstone
A. F. Gregoline
G. S. Greene
D. E. Griffith
R. W. Grubbs
B. F. Gumbiner
F. A. Gutierrez
C. M. Harless
A. T. Harris
R. M. Hedrick
Maxwell Herschleder
Harry L. Kahan
A. M. Kan
Nicholas Keseric
Mikes N. Kalavios
F. J. Kendrick
Geo. J. Kolettis
Arnold O. Lieberman
Georgianna Lutz
M. C. Marcus
B. W. Marshall
F. J. McMichael
Frank W. Merritt
Ira Miltimore
O. B. Nesbit
H. C. Parker
C. M. Reyher
P. J. Rosenbloom
H. J. Ryan
L. K. Ryan
E. L. Schaible
Thos. J. Senese
M. Shellhouse
E. D. Skeen
J. P. Stawicki
C. M. Stoycoff
T. B. Templin
Susie Thompson
G. L. Verplank
James P. Vye
A. A. Watts
R. O. Wharton
J. M. White
W. J. White
O. C. Wicks
Robt. N. Wimmer
C. W. Yarrington
P. S. Yocum

Hammond

W. M. Bigger
J. T. Bolin
Fred Braginton,
member Marion Co.
W. A. Buchanan
B. W. Chidlaw
J. F. Clancy
H. G. Cole
G. M. Cook
C. H. Crews
Alice H. Davis
E. L. Eggers
H. W. Eggers
Ray Elledge
D. C. Emenhiser
J. L. Emenhiser
N. K. Forster
F. H. Fox
M. B. Gevirtz
L. V. Gorrilla
H. C. Groman
Arthur H. Hansen
H. S. Hicks
Andrew Hofmann
W. A. Hornaday
W. H. Howard
E. S. Jones
R. W. Kretsch
Hedwig S. Kuhn
Hugh A. Kuhn
A. W. Lloyd
Chas. B. Matthews
C. A. McVey
O. O. Melton
Richard B. Nelson
W. E. Nichols
Louis Nodinger
T. W. Oberlin
R. O. Ostrowski
J. R. Pugh
C. W. Rauschenbach
A. W. Rhind
Perry Q. Row
J. Schlesinger
E. M. Shanklin
Stanley Skrentny
H. J. White
A. A. Young

Hobart

Jacob Ader
L. E. Dupes
H. F. Flannigan
L. M. Friedrich
Dwight Mackey
A. G. Miller

Whiting

O. F. Benz
David W. Bopp
Harry Brandman
Frank R. Doll
C. Frankowski
J. A. McCarthy
Clifford M. Jones
L. T. Kudele
A. J. Lauer
B. B. Reeve
Harry Silvian
Theodore J. Smith
L. J. Wisch

Lowell

D. W. Anderson
Neal Davis
Franklin Petry

Griffith

F. A. Malmstone

LAPORTE COUNTY

LaPorte

C. E. Burleson
E. F. W. Crawford
C. B. Danruther
J. H. Fargher
R. B. Jones
J. N. Kelly
Robert M. Kelsey
G. W. Kimball
James Kistler
G. O. Larson
E. E. Linn
S. P. Morgan
W. W. Ross
A. R. Simon
F. T. Wilcox
R. F. Wilcox

Michigan City

E. G. Blinks
H. L. Brooks
J. H. Foster
R. A. Gilmore
(H) J. J. Kerrigan
J. V. Kerrigan
R. L. Kerrigan
Aimee R. Killough
Geo. M. Kricger
Emil O. Krueger
F. V. Martin
J. R. Phillips
J. D. Price
Nelle C. Reed
Lawrence M. Robrock
J. B. Rogers
Bertha Rose
L. E. Stephenson
F. R. Warren
P. H. Weeks
L. A. Wilson

Rolling Prairie

C. W. Brown

Hanna

H. A. Garner

Westville

F. H. House

Wanatah

Chas. E. Mayfield

LaCrosse

D. D. Oak

Stillwell

Wm. Walkinshaw

LAWRENCE COUNTY

Bedford

L. H. Allen
Norman R. Byers
Joseph Dusard
Charles B. Emery
Chas. H. Emery
Frank D. Martin
W. Harold McKnight
A. E. Newland
H. C. Ragsdale
M. O. Robertson
Morrell E. Simpson
Robert B. Smallwood
C. E. Stone
R. E. Wynne

Mitchell

James D. Byrns
Wm. H. Dings
John A. Gibbons
J. R. Hamilton
Walter C. Sherwood

Heltonville

Jasper Cain

Oolitic

Claude Dollens

Williams

J. T. McFarlin

MADISON COUNTY

Alexandria

J. L. Carpenter
J. J. Gibson
F. G. Keller
A. E. Otto
George H. Overpeck
C. D. Schurtz

Anderson

C. L. Armington
John C. Armington
Robert Armington
M. A. Austin
Kenneth D. Ayres
C. H. Brauchla
E. E. Brock
Etta Charles
A. W. Collins
E. M. Conrad
John C. Drake
A. D. Erehart
H. W. Gante
F. C. Guthrie
Harry G. Hockett
Lee Hunt
Thomas M. Jones
B. A. King
E. F. King
Jack King
O. A. Kopp
E. D. Knight
Sam W. Litzenberger
J. A. Long
C. C. McArdle
V. G. McDonald
O. E. McWilliams
Doris Meister
George B. Netcalf.
W. M. Miley
Paul Leon Nelson
L. L. Nesbit
D. S. Quickel
Clarence V. Rozelle
P. Samson
T. J. Stephenson
S. J. Stottlemyer
J. R. Tracy
G. B. Wilder
F. M. Williams
C. L. Willson
F. B. Wishard
R. O. Zierer

Elwood

J. E. Cullipher
R. N. Filiatreau
H. W. Fitzpatrick
W. H. Hoppenwrath
W. M. Hoppenwrath
W. A. Laudeman
M. L. Ploughe
R. R. Ploughe

Frankton

J. C. Miller
Web Peck

Pendleton

L. E. Alexander
E. E. Hunt
A. T. Jones
C. P. McLaughlin

Summitville

Seth Irwin
L. F. Mohley

Markleville

D. N. Conner

Lapel

John I. Rinne

MARION COUNTY

Indianapolis

D. S. Adams
H. C. Adkins
Henry R. Alburger
Howard Aldrich
H. R. Allen
Wm. F. Allison
E. O. Alvis
E. M. Amos
D. A. Anderson
R. J. Anderson
E. G. Anthony
Richard Appel, member Marshall Co.
R. L. Arbuckle
Wm. E. Arbuckle
Sidney S. Aronson
J. A. M. Aspy
A. S. Ayres
Max A. Bahr
O. H. Bakemeier
James F. Balch
H. M. Banks
M. J. Barry
D. A. Bartley
G. W. Batman
Robert R. Beach
Paul Beard
T. J. Beasley
Norman M. Beatty
William S. Beck
H. F. Beckman
R. C. Beeler
L. D. Belden
Henry I. Berger
J. K. Berman
D. F. Berry
M. E. Beverland
L. D. Bihler
Charles R. Bird
E. F. Boggs
C. B. Bohner
George S. Bond
Daniel L. Bower
Geo. W. Bowman
Floyd A. Boyer
W. V. Boyle
John R. Brayton
A. S. Brown
Edward A. Brown
Frances T. Brown
L. W. Brown,
member Allen Co.
Walter L. Bruetsch
Louis Burckhardt

Rose J. Buttz
E. E. Cahal
H. F. Call
J. W. Canaday
(H) Amos Carter, member Hendricks Co.
James C. Carter
L. D. Carter
Oren E. Carter
R. S. Chappell
K. K. Chen
Frederick D. Cheney
C. J. Clark
C. P. Clark
Edmund D. Clark
Marion E. Clark
W. F. Clevenger
R. R. Coble
J. N. Collins
Geo. W. Combs
Elizabeth S. Conger
Jos. L. Conley
Glenn Conway
Robert E. Conway
J. W. Cooper
S. J. Copeland
M. Cornacchione
Thomas E. Courtney
C. E. Cox
Homer W. Cox
K. L. Craft
F. W. Cregor
Clyde G. Culbertson
Paul K. Cullen
C. H. Cunningham
J. M. Cunningham
John E. Dalton
J. C. Daniel
N. Cort Davidson
C. W. Day
John Day
R. M. Dearmin
Murray DeArmond
Blan F. Deer
C. Bowen DeMotte
Dwight DeWeese
J. W. Denny
William Doeppers
W. L. Dorman
Frank T. Dowd
William M. Dugan
Thomas J. Dugan
Harold Dunlap
L. M. Dunning
E. W. Dyar, Jr.
J. Wayne Ebert
Evanson B. Earp
J. H. Eberwein
C. L. Eisaman
Roy Egbert
Bert Ellis
L. L. Ely
Charles P. Emerson
John T. Emhardt
John W. Embardt
L. A. Ensminger
Bernhard Erdman
C. Basil Fausett
Frank B. Fisk
F. M. Fitch
J. O. Flora
D. W. Fosler
Harry L. Foreman
Frank Forry
P. J. Fouts
A. G. Funkhouser
Elmer Funkhouser
R. M. Funkhouser
Paul C. Furgason
S. A. Furniss
William E. Gabe
Euclid T. Gaddy
George J. Garceau
William Garner
John D. Garrett
J. A. Garretson
W. P. Garshwiler
F. M. Gastineau
W. D. Gatch
Julius H. P. Gauss
Roy A. Geider
Charles L. George
Herman Gick
F. E. Gifford
J. E. Gillespie
L. H. Gilman
R. L. Glass
J. L. Glendening
H W. Goss
A. B. Graham
N. P. Graham
J. J. Gramling
John W. Graves
Oliver W. Greer
G. W. Gustafson

Carl Habich
Murray N. Hadley
Edmund B. Haggard
E. V. Hahn
Franklin T. Hallam
H. G. Hamer
O. P. Hannebaum
A. K. Harcourt
Myron S. Harding
E. H. Hare
A. H. Harold
N. E. Harold
V. K. Harvey
J. H. Hatfield
S. J. Hatfield
Everett Hays
H. H. Heinrichs
John D. Hendricks
A. M. Hetherington
Walter Hickman
James M. Himler
Russell Hippensteel
Fletcher Hodges
J. Wm. Hofmann
A. A. Hollingsworth
J. E. Holman
Foster J. Hudson
J. E. Hughes
W. F. Hughes
L. B. Hurt
Paul T. Hurt
Bernard Hyman
Paul G. Iske
F. E. Jackson
G. B. Jackson
J. L. Jackson
J. W. Jackson
H. A. Jacobs
A. S. Jaeger
O. S. Jaquith
W. O. Jenkins, member Vigo Co.
Wm. L. Jennings
C. H. Jinks
James E. Jobes
N. E. Jobes
A. S. Johnson
Roy W. Johnson
T. B. Johnson
M. V. Kahler
D. O. Kearby
T. V. Keene
S. H. Keeney
C. H. Keever
V. D. Keiser
Don E. Kelly
J. F. Kelly
Walter F. Kelly
R. J. Kemper
G. F. Kempf
Wm. H. Kennedy
H. R. Kerr
John F. Kerr, Jr.
Jane M. Ketcham
E. N. Kime
Wm. E. King
J. K. Kingsbury
E. F. Kiser
Harry E. Kitterman
F. C. Klein
Karl M. Koons
L. H. Kornafel
Bennett Kraft
Herman W. Kuntz
Fred B. Kurtz
I. J. Kwitny
Napoleon LaBonte
E. B. Lamb
P. T. Lamey
Harry K. Langdon
V. A. Lapenta
Bernard J. Larkin
George F. Lawler
Daniel W. Layman
J. K. Leasure
H. L. Leatherman
D. R. Lee
Henry S. Leonard
Leon Levi
J. R. Lewis
M. B. Light
E. O. Lindenmuth
E. L. Lingeman
Goethe Link
J. J. Littell
E. O. Little, member Hendricks Co.
W. D. Little
John W. Little
R. L. Lochry
W. H. Long
Norman S. Loomis
G. C. Lord
George E. Lowe
F. J. H. Luck
Oscar D. Ludwig

Emery D. Lukenbill
J. A. McDonald
D. E. MacGregor
H. L. Magennis
Marlow W. Manion
A. L. Marshall
C. R. Marshall
J. A. Martin
C. W. Marxer
J. Melvin Masters
R. J. Masters
B. J. Matthews
R. O. McAlexander
James S. McBride
Wm. A. McBride
Joseph C. McCallum
D. J. McCarthy
C. H. McCaskey
J. F. McCool
C. O. McCormick
P. E. McCown
C. B. McCulloch
E. C. McDonald
Chas. J. McIntyre
Fred G. McMillan
Charles McNaull
Lyman T. Meiks
W. E. Mendenhall
H. O. Mertz
H. B. Mettel
A. J. Micheli
H. N. Middleton, member Madison Co.
J. Don Miller
Wm. T. Miller
Earl H. Mitchell
R. E. Mitchell
W. P. Moenning
W. F. Molt
B. B. Moore
R. M. Moore
Chas. A. Morgan
Walter P. Morton
R. H. Moser
M. H. Mothersill
H. G. Morgan
J. E. Moutoux
A. E. Mozingo
Lillian B. Mueller
E. B. Mumford
Chas. W. Myers
R. V. Myers
C. A. Nafe
Louis T. Need
A. S. Neely
O. C. Neier
Byron Nixon
Sater Nixon
T. B. Noble, Jr.
T. B. Noble, Sr.
H. F. Nolting
O. B. Norman
H. L. Norris
A. A. Ogle
C. E. Orders
R. C. Ottinger
F. V. Overman
J. E. Owen
E. E. Padgett
John F. Parker
Martin T. Patton
Lyman R. Pearson
A. C. Pebworth
James T. Pebworth
W. E. Pennington
R. J. D. Peters
T. V. Petranoff
B. B. Pettijohn
F. L. Pettijohn
Dudley Pfaff
J. A. Pfaff
C. A. Pfafflin
Jack E. Pilcher
Harry S. Rabb
F. B. Ramsey
J. V. Reed
Chas. A. Reid
Frank P. Reid
Simon Reisler
Theo. D. Rhodes
Thurman B. Rice
J. W. Ricketts
J. F. Rigg
E. B. Rinker
J. O. Ritchey
Ray Robertson
Clarke Rogers
C. W. Roller
D. Hamilton Row
Geo. S. Row
Karl R. Ruddell
C. L. Rudesill
Ernest Rupel
Byron K. Rust
Charles D. Ryan
Glenn V. Ryan

Russell Sage
C. R. Schaefer
E. Lee Shiflett
E. W. Scheier
A. J. Schneider
Ada E. Schweitzer
John G. Scifres
Albert Seaton
G. W. Seaton
Louis H. Segar
S. Kenosha Sessions
W. Leland Sharp
Wm. Shimer
L. L. Shuler
O. W. Sicks
D. H. Sluss
J. H. Smiley
David L. Smith
E. Rogers Smith
Fred C. Smith
Lester A. Smith
Roy Lee Smith
Byron Snider
R. A. Solomon
Martha C. Souter
J. W. Sovine
Chas. R. Sowder
Alan L. Sparks
M. J. Spencer
Mary A. Spink
Urbana Spink
Russell J. Spivey
Carl B. Sputh
James B. Stalker
C. A. Stayton
John T. Stewart
Walter Stoeffler
Jos. L. Storey
Tyler J. Stroup
J. H. Stygall
C. C. Taylor
F. W. Taylor
J. M. Taylor
Merrel H. Taylor
Frank Teague
B. J. Terrell
R. G. Thayer
A. A. Thomas
C. F. Thompson
Harold C. Thornton
J. R. Thrasher
A. L. Thurston
H. F. Thurston
H. S. Thurston
W. E. Tinney
W. B. Tinsley
W. S. Tomlin
O. N. Torian
Frank L. Truitt
H. M. Trusler
H. A. VanOsdol
C. F. Voyles
J. Thayer Waldo
E. DeWolfe Wales
F. C. Walker
Robert K. Walker
Fredk. C. Warfel
J. H. Warvel
E. S. Waymire
John W. Webb
J. O. Wehrman
H. J. Weil
Chas. A. Weller
A. F. Weyerbacher
Homer H. Wheeler
J. T. Wheeler
Joel Whitaker
John M. Whitehead
Irwin W. Wilkins
Luther Williams
Matthew Winters
Wm. Wise
W. N. Wishard
Wm. N. Wishard, Jr.
George Wood
Wm. V. Woods
Cecil S. Wright
J. W. Wright
J. E. Wyttenbach
C. B. Yott
J. B. Young
Leon G. Zerfas

Oaklandon

Chas. J. Kneer
Wm. McQueen

New Augusta

E. O. Asher
G. A. Coble

Beech Grove

R. W. Blackford
Raymond Butler
Y. D. Kim
James C. Rhea

Bridgeport

F. L. Hade

Castleton

C. C. McFarlin

Lawrence

C. W. McMillen

Southport

Morris B. Paynter

MARSHALL COUNTY

Argos

F. H. Kelly
H. M. McCracken

Culver

Paul A. Campbell
C. G. Mackey
Donald Reed
H. H. Tallman

Plymouth

C. H. Bockoven
Ida L. Ehy
Thomas C. Eley
C. F. Holtzendorff
C. A. Inks, member Elkart Co.
P. R. Irey
Harry Knott
R. Clarence Stephens
L. W. Vore

Bremen

Wallace Buchanan
E. Lee Burrous, member Elkhart Co.
R. H. Draper

Bourbon

Cova R. Graham
F. E. Radcliffe

Tyner

A. A. Thompson

MIAMI COUNTY

Peru

E. H. Andrews
O. U. Carl
B. F. Eikenberry
Donald W. Ferrara
S. J. Ferrara
Cloyn R. Herd
Cecil Jordan
O. R. Lynch
F. M. Lynu
S. D. Malouf
O. C. Wainscott
J. E. Yarling

Bunker Hill

E. W. Bailey

Macy

P. B. Carter
E. L. Waite

Chili

H. E. Line

Converse

J. D. Malott
A. S. Newell

Denver

J. W. Newell

Mexico

C. F. Rendel

Miami

James B. Shoemaker

MONROE COUNTY

Bloomington

F. H. Austin
R. C. Austin
F. H. Batman
R. M. Borland
W. N. Culmer
R. A. Demotte
Dillon Geiger
D. J. Holland
Geo. F. Holland
J. E. P. Holland
Phillip Holland
D. L. Lutes
J. E. Luzadder
Robt. Lyons
C. H. Marchant
J. E. Moser
B. D. Myers
Margaret T. Owen
M. F. Poland
Wm. C. Reed
R. C. Rogers
Ben R. Ross
Melville Ross
R. D. Smith
C. C. Stroup
Harry B. Thomas
Frank F. Tourner
T. L. Wilson
James W. Wiltshire
Homer Woolery

Smithville

G. L. Mitchell

MONTGOMERY COUNTY

Crawfordsville

T. Z. Ball
Geo. E. Clements
G. A. Collett
Thomas L. Cooksey
Fred N. Daugherty
L. H. Davis
Fred A. Dennis
Wemple Dodds
J. B. Griffith
H. A. Kinnaman
Byron N. Lingeman
A. L. Loop
Robt. Millis
W. L. Straughn
A. A. Swope
G. T. Williams

Darlington

J. B. Cushman
Robert R. Pollom
John L. Sharp

Ladoga

Maurice E. Gross

Wingate

F. D. Allhands

Waynetown

H. M. Bounell
A. S. Faulkner

New Ross

C. T. Bronaugh
Charles Riley

New Richmond

H. D. Kindell

Wareland

Jas. Noblitt

MORGAN COUNTY

Martinsville

P. M. Alexander
C. G. Bothwell
H. H. Dutton
Robert Egbert
Leon Gray
Edw. M. Pitkin
M. C. Pitkin
Geo. L. Sandy
S. P. Seberer
Austin D. Sweet
H. R. Willan

Mooresville

Charles Aker
J. E. Comer
W. J. Stangle

Brooklyn

L. M. Hughes

Eminence

B. E. Lemmon member Putnam Co.

Paragon

J. H. McNeill

Morgantown

M. G. Murphy
James M. Smith, member Marion Co.

NOBLE COUNTY

Albion

W. F. Carver
J. W. Morr
J. R. Nash

Kendallville

C. B. Goodwin
Richard R. Gutstein
C. F. Hardy
I. H. Lawson
F. W. Messer
C. E. Munk
J. D. Seybert
H. O. Williams
S. J. Young

Ligonier

W. P. Barnhill
F. W. Black
J. B. Schutt
(H) W. A. Shobe
T. N. Siersdorfer
Q. F. Stultz

Wolflake

H. A. Luckey
J. E. Luckey
R. C. Luckey

Cromwell

J. H. Nye
A. J. Rarick

Avilla

Wm. M. Veazey

ORANGE COUNTY

French Lick

George R. Dillinger
J. R. Dillinger
C. D. Fulkerson

Orleans

Robert E. Baker
W. H. Patton
Wm. E. Schoolfield
Oscar H. Stewart
W. S. Workman

Paoli

R. L. Holaday
John I. Maris
S. F. Teaford

West Baden

Clarence E. Boyd
Mart Hassenmiller
H. L. Miller

Leipsic

G. G. Colglazier

OWEN COUNTY

Spencer

M. S. Brown
Oran Kay
Charles F. Pectol
Robert H. Pierson

Coal City

Boaz Yocum

Patricksburg

R. H. Richards

Gosport

Julia S. Thom
J. W. Thom

PARKE-VERMILLION COUNTY

Clinton

F. McH. Beeler
I. M. Casebeer
Paul B. Casebeer
Otto Casey
W. D. Gerrish
D. C. Shaff
J. F. Swayne
C. M. White
I. D. White
C. M. Zink

Dana

Wm. C. Myers
A. E. Sabin

Rockville

J. R. Bloomer
T. J. Collings
E. H. Dowell
Walter A. Foreman

J. V. Pace
H. B. Pirkle

Cayuga

R. E. Brown
S. C. Darroch

Montezuma

R. L. Dooley

Rosedale

I. J. Gill
C. S. White

Bloomingdale

F. G. Green

St. Bernice

S. I. Green

Perrysville

W. A. Johnson, member Fountain-Warren Co.

Newport

J. L. Saunders

PERRY COUNTY

Cannelton

H. R. Bush
D. S. Conner
E. E. Schriefer, member Jackson Co.

Tell City

Porter J. Coultas
David Dukes
W. T. Hargis
N. A. James

Bristow

S. L. Epple

Troy

E. R. Snyder

Leopold

J. E. Taylor

PIKE COUNTY

Petersburg

G. A. Dickinson
J. T. Kime
A. R. Logan
T. R. Rice

Winslow

G. B. DeTar

Velpen

D. E. Taylor

PORTER COUNTY

Hebron

W. C. Butman
F. J. Kleinman

Valparaiso

J. C. Brown
P. M. Corboy
Carl M. Davis
C. H. Dewitt
A. O. Dobbins
G. R. Douglas
J. R. Frank
E. H. Miller
E. H. Powell
H. O. Seipel
G. H. Stoner
Arthur J. Van Winkle

Chesterton

R. H. Axe
J. W. Dale
W. M. Parkison

Kouts

S. E. Dittmer

Porter

G. C. Kasdorf

POSEY COUNTY

Cynthiana

J. E. Gudgel
S. B. Montgomery

Mt. Vernon

W. B. Challman
John E. Doerr
C. H. Fullinwider
W. E. Jenkinson
J. R. Ranes

New Harmony

H. E. Ropp

Poseyville

Paul Boren
S. W. Boren
A. L. Woods

Wadesville

Chas. Arburn

PULASKI COUNTY

Winamac

Thos. E. Carneal

Medaryville

R. P. Hackley
C. E. Linton

Monterey

A. J. Kelsey

PUTNAM COUNTY

Cloverdale

Clyde Gray
E. M. Hurst

Greencastle

J. F. Gillespie
C. A. Hicks
W. R. Hutcheson
C. B. O'Brien
W. M. O'Brien
W. M. McGaughey
Gilbert D. Rhea
C. C. Tucker
V. Earle Wiseman

Roachdale

C. C. Collins
C. N. Stroube

Bainbridge

Lester W. Veach

RANDOLPH COUNTY

Farmland

O. E. Current
Russell B. Engle

Union City

Leroy B. Chambers
George H. Davis
L. K. Phipps
Robert W. Reid
Fred McK. Ruby
R. A. Voisinet

Winchester

I. E. Brenner
W. S. Dininger
L. W. Painter
J. S. Rohison

Parker

P. C. Barnard, member Delaware-Blackford Co.
William Deutsch member Delaware-Blackford Co.

Modoc

Wayne Harmon

Ridgeville

Arvin Henderson
C. W. Mullikin

Lynn

L. E. Jordan
C. E. Martin
J. M. Wallace

Saratoga

C. E. Spitler

RIPLEY COUNTY

Batesville

J. C. Bigham
J. T. Carney

Milan

Arthur Whitlatch
Bine Whitlatch
I. A. Whitlatch

Osgood

M. Joseph Coomes
George S. Row
R. Lee Smith

Sunman

Chas. F. Fletcher, member Dearborn-Ohio Co.

Versailles

L. H. Hopkins
Lowell G. Hunter

RUSH COUNTY

Rushville

C. C. Atkins
J. F. Bowen
F. H. Green, Sr.
F. H. Green, Jr.
Lowell M. Green
R. O. Kennedy
John M. Lee
H. V. Logan
H. P. Metcalf
(H) J. C. Sexton
Roy E. Shanks
C. L. Smullen
D. D. VanOsdol
J. E. Walther
E. I. Wooden

Carthage

William S. Coleman
G. B. McNabb

Manila

George I. Inlow, member Shelby Co.

Glenwood

W. R. Phillips, member Fayette-Franklin Co.

Milroy

Willis Pugh

Arlington

A. G. Shauck

ST. JOSEPH COUNTY

Mishawaka

James G. Bostwick
Verna Christophel
W. B. Christophel
W. N. DuVall
Chas. J. Goethals
Henry J. Graham
B. M. Hutchinson
F. W. Logan
R. M. McDonald
J. B. Seaman
E. M. Sirlin
Wendell L. Spalding
L. P. VanRie
Merle E. Whitlock
H. C. Wurster
M. D. Wygant
B. J. Wyland
Henry J. Zimmer

South Bend

J. A. Abel
Robt. B. Acker
G. B. Allen
E. K. Ayling
W. H. Baker
Morris Balla
J. B. Berteling
David A. Bickel
P. J. Birmingham
Chas. A. Bishop
Erwin Blackburn
B. J. Bolka
L. A. Bolling
John C. Boone
C. S. Bosenhury
Harry Boyd-Snee
Fred W. Buechner
C. F. Bussard
C. S. Camphell
F. R. Nicholas Carter
J. V. Cassady
F. R. Clapp
Stanley A. Clark
David H. Condit
H. L. Cooper
C. B. Crumpacker
R. B. Dugdale
J. A. Duggan
F. P. Eastman
S. R. Edwards
Charles Eisenbeiss
Alfred Ellison
Ladislaus Faltin
J. H. Fears
C. M. Fish
Lawrence F. Fisher
L. L. Frank
DeVon W. Frash
Gladys D. Frith
Louis G. Frith
Geo. J. Geisler
M. M. Gilman
A. S. Giordano
J. M. Gordon
George F. Green
Donald Grillo
Paul E. Haley
Vachelle E. Harmon
H. W. Helmen
John W. Hilbert
J. W. Hill
Marion W. Hillman
W. H. Hillman
R. V. Hoffman
A. D. Huffman
Carroll Hyde
Bernard A. Kamm
Arthur L. Knapp
Kenneth T. Knode
A. A. Kramer
C. J. Langenbahn
E. J. Lent
N. S. Lindquist
Martha B. Lyon
M. W. Lyon
C. M. Malstaff
J. E. McMeel
Milo Miller
William E. Miller
H. F. Mitchell
(H) H. T. Montgomery
E. P. Moore
C. A. Mott
Edgar H. Myers
E. E. Parker
Thomas B. Pauszek
L. E. Pennington
V. M. Pennington
A. Petrass
Harold D. Pyle
Herman H. Rodin
G. M. Rosenheimer
Robert B. Sanderson
Isadore Sandock
Harry H. Sandoz
Louis A. Sandoz
C. E. Savery
Keith E. Selby
C. M. Sennett
R. L. Sensenich
H. B. Shedd
P. G. Skillern
H. H. Slominski
R. W. Spenner
A. M. Sullivan
C. C. Terry
Ray H. Thomas
C. A. Thompson
Maurice J. Thornton
P. C. Traver
Charles R. Vickery
Henry E. Vitou
W. G. Wegner
Apolina A. Wilson
J. L. Wilson

North Liberty

John J. Hardy

Lakeville

John T. How
Louis E. How

Walkerton

C. D. Linton

New Carlisle

J. E. Luzadder, Jr.

SCOTT COUNTY

Scottsburg

Marvin McClain
Floyd Napper
J. P. Wilson

SHELBY COUNTY

Shelbyville

R. W. Gehres
Luther J. Hord
Louis F. Hulsman
Herbert Inlow
C. Fred Inlow
W. D. Inlow
B. G. Keeney
Samuel Kennedy
Walter McFadden
R. M. Nigh, member Wayne-Union Co.
Franklin E. Ray
L. C. Sammons
C. A. Tindall
P. R. Tindall
W. R. Tindall
W. W. Tindall

Waldron

S. B. Coulson
J. E. Keeling

Flat Rock

J. A. Davis

Morristown

Margaret L. Maisoll
V. C. Patten

Fountaintown

H. E. Nave

Fairland

M. M. Wells

SPENCER COUNTY

Rockport

Eva J. Buxton
C. D. Ehrman
J. C. Glackman
H. C. Rininger, member Randolph Co.

Newtonville

H. T. Harter

Dale

Claude Lomax

Lamar

N. L. Medcalf

Chrisney

C. L. Springstun

STARKE COUNTY

North Judson

Albert Fisher, member LaPorte Co.

STEUBEN COUNTY

Angola

D. W. Creel
L. L. Eberhart
S. S. Frazier
Katherine Jackson, member Allen Co.
W. H. Lane
John H. Oyer
P. N. Sutherland
O. H. Swantusch
W. F. Waller

Fremont

B. A. Blosser

Pleasant Lake

G. N. Lake

SULLIVAN COUNTY

Carlisle

J. S. Brown
Charles E. Whipps

Dugger

E. M. Deputy
F. M. Dukes

Farmersburg

Harry O'Dell
J. T. Oliphant

Shelburn

Vincent R. Lazo
J. H. Wrork

Sullivan

Marion H. Bedwell
J. M. Billman
C. F. Briggs
E. M. Corbin
James H. Crowder
J. R. Crowder
Paul Higbee
J. B. Maple
G. D. Scott
W. N. Thompson
John W. Woner

Fairbanks

H. E. Bland

Merom

J. J. Parker

Hymera

C. U. Thralls

SWITZERLAND COUNTY

Vevay

Fred C. Bakes
L. H. Bear
G. W. Copeland
R. M. Copeland
Geo. E. Ellerbrook

Patriot

M. N. Daubenheyer

TIPPECANOE COUNTY

Lafayette

R. F. Annis
A. C. Arnett
A. J. Bauer
R. H. Bayley
R. R. Calvert
O. U. Chenoweth
G. R. Clayton
Ira Cole
A. B. Coyner
W. T. Cox
F. S. Crockett
Edward C. Davidson
C. V. Davisson
G. R. Donahue
M. J. Eaton
Russell A. Flack
M. G. Frasch
Thomas G. Graham
O. E. Griest
Frank Hall
G. W. Herrold
L. J. Holladay
F. P. Hunter
(H) Chas. Hupe
R. G. Ikins
Chas. B. Kern
H. E. Klepinger
Manson M. Lairy
H. J. Laws
Guy P. Levering
F. A. Loop
F. A. Loop, Jr.
H. G. Martin
D. C. McClelland
D. H. McKinney
Adah McMahan
John S. Morrison
Walter H. Mytinger
Samuel Pearlman
W. G. Pippenger
F. L. Pyke
Frank W. Ratcliff
Wm. M. Reser
F. T. Romberger
C. H. Rommel
C. L. Rowland
E. B. Ruschli
A. W. Schreiber
J. W. Shafer
L. O. Sholty, member Wabash Co.
Harper G. Sichler
L. C. Smith
Edward Stahl
H. N. Swezey
G. A. Thomas
(H) F. B. Thompson
Geo. R. Tubbs
Earl VanReed
W. W. Washburn
R. B. Wetherill
C. M. Wray

West Lafayette

H. H. Ash
J. C. Burkle
Louise J. Meikle
S. J. Miller

Westpoint

J. E. Alexander
Carl J. Trout

Battle Ground

Frank M. Biddle

Dayton

W. F. McBride

Romney

O. L. McCay
E. T. Mitchell

Clark's Hill

H. M. Mugg

Colburn

Robt. H. Wagoner

TIPTON COUNTY

Tipton

A. E. Burkhardt
B. A. Burkhardt
J. V. Carter
R. L. Fullerton
H. E. Grishaw
G. H. Warne

Windfall

B. V. Chance
E. B. Moser

Goldsmith

S. M. Cotton

Sharpsville

H. B. Shoup

VANDERBURGH COUNTY

Evansville

R. R. Acre
A. E. Allenbaugh
(H) Charles P. Bacon
C. S. Baker
Herman Baker
J. S. Baker
I. C. Barclay
William E. Barnes
Stella Boyd
C. R. Buikstra
William C. Caldwell
A. F. Clements
Walter R. Cleveland
Herman Combs
Pearl B. Combs
W. H. Coleman
Earl Conover
Paul D. Crimm
C. W. Cullnane
William D. Davidson
W. R. Davidson
E. K. Denzer
H. S. Dieckman
H. S. Dome
Geo. C. Dinlevy
W. S. Ehrich
Sidney J. Eichel
G. H. Espenlaub
Henry J. Faul
Dallas Fickas
W. H. Field
C. J. Folz
Wm. G. French
L. E. Fritsch
H. M. Garrison
John H. Hare
F. Minton Hartz
A. M. Hayden
Wm. F. Healy
C. C. Herzer
Warren W. Hewins
J. N. Jerome
G. C. Johnson
H. M. Kauffman
Bleeker Knapp

Shirley C. Lang
C. S. Laubscher
S. R. Laubscher
W. J. Laval
Chas. F. Leich
Jesse R. Logan
Harold D. Lynch
Paul Lynch
Clarence G. Macer
Pierce MacKenzie
E. F. Magenheimer
D. V. McClary
(H) J. C. McClurkin
W. E. McCool
J. D. McDonald
Walter McDowell
Leonard K. McMurty
K. T. Meyer
Minor Miller
Adeline F. Muelchi
Henry Nenneker
A. E. Newman
J. W. Phares
Walter Pollard
Isadore J. Raphael
Bernard Ravdin
Marcus Ravdin
T. F. Reitz
Clifford Richey, member Marion Co.
W. H. Rietz
Geo. M. Royster
H. C. Ruddick
Harmon L. Stanton
O. C. Stephens
Urban Stork
Chas. C. Sutter
D. G. Tweedall
G. B. Underwood
Victor Varner
Robert W. Viehe
John W. Visher
R. M. Walden
Edgar H. Weber
H. G. Weiss
J. E. Welborn
J. Y. Welborn
J. E. Wier
Charles F. Willis
J. H. Willis
Ralph Wilson
S. W. Wishart
W. P. Woods
J. F. Wynn
P. E. Yunker

Armstrong

Wm. M. Wilhelmus

VIGO COUNTY

Riley

C. M. DuPuy
Virgil French
Norman Silverman

Terre Haute

O. O. Alexander
Orris T. Allen
W. C. Anderson
C. W. Asbury
W. D. Asbury
E. R. Baldridge
W. O. Baldridge
H. L. Bernheimer
M. J. Bohannon
E. B. Boots
Henry W. Bopp
Stephen C. Bradley
Paul J. Bronson
A. L. Cabell
A. H. Caffee
G. C. Carpeuter
A. W. Cavins
Chas. N. Combs
G. C. Congleton
J. J. Connelly
J. H. Cook
W. G. Crawford
O. G. Cruishank
Claude A. Curry
J. E. Dailey
R. J. Danner
H. B. Decker
James E. Donnelly
Robt. E. Downing
Rudolph Duenweg
Eugene Eisenlohr
D. H. Forsyth
J. E. Freed
J. O. Garrigus
D. A. Gerrish
Ivan Gilbert
John R. Gillum
R. G. Harkness
E. R. Haslem
J. H. Hauck
D. A. Hoover
J. J. Hoover
Edgar J. Hunt
W. B. Hunt
B. M. Hutchings
F. H. Jett
A. F. Knoefel
Joseph Kunkler
William C. Kunkler
C. Russell LaBier
Clarence R. LaBier
A. H. Lee
C. L. Luckett
J. B. Maguire
L. A. Malone
E. L. Mattox
E. C. McBride
Noah S. McBride
F. G. McCarthy
James W. McEwen
D. B. Miller
W. H. Miller
Albert M. Mitchell
James J. Moorhead
H. M. Mullikin
G. G. Musselman
E. O. Nay
E. S. Niblack
H. J. Pierce
R. F. Price
James V. Prouty
C. E. Ragan
A. E. Rhein
James V. Richart
Floyd Riggs
Gerald Rubin
F. E. Sayers
Edw. J. Schott
Etta B. Selsam
V. A. Shanklin
Louis Siebenmorgen
I. H. Sloss
S. A. Smoots
James Spigler
O. R. Spigler
W. E. Stewart
Daniel S. Strong
John M. Sullivan
F. A. Tabor
G. J. Thomson
M. C. Topping
D. R. Ulmer
Arnold Utterback
C. R. Van Arsdall
H. R. Vandivier
M. B. Van Cleave
Frank L. Wedel
J. H. Weinstein
F. E. Wiedemann
Fred Wilson
Charles Wyeth
Franklin Young
J. Rudolph Yung
E. T. Zaring

Seelyville

C. S. Carmichael

New Goshen

J. B. Loving

Prairie Creek

J. R. Wilson

WABASH COUNTY

North Manchester

G. D. Balsbaugh
Z. M. Beaman
O. G. Brubaker
L. Z. Bunker
F. S. Kitson
I. E. Perry
J. L. Warvel

Wabash

(H) J. T. Biggerstaff
L. E. Jewett
Minnetta Jordan
G. M. LaSalle
R. M. LaSalle
R. A. Naugle
Ed Pearson
Wm. Pearson
Arthur P. Rhamy
J. W. G. Stewart
N. H. Thompson
F. M. Whisler

Roann

James G. Kidd

Lagro

M. E. Renner

Somerset

A. J. Steffen

LaFontaine

J. L. Walker

WARRICK COUNTY

Boonville

Bowen Hoover
J. G. Hoover
P. N. Hoover
Charles F. Martin
P. E. Wilson

Newburgh

C. J. Munns
Chas. M. Wilhelmus

WASHINGTON COUNTY

Salem

Donald Colglazier
Irvin Huckleberry
J. I. Mitchell
Claude B. Paynter
L. W. Paynter

Pekin

Wm. L. Green

Campbellsburg

Bryant F. Horner

WAYNE-UNION COUNTY

Cambridge City

Paul G. Hill
C. E. Kenyon
L. A. Stamper

Liberty

Franklin T. DuBois
James F. Lewis
W. B. McWilliams
Solomon G. Smelser
W. A. Thompson

Richmond

Hubert E. Allen
W. E. Ballinger
J. C. Blossom
Paul W. Blossom
C. S. Bond
F. P. Buche
J. C. Clawson
Randolph Compton, member Ripley Co.
Volney N. Fackler
J. M. Fouts
V. C. Griffis
Harvey Hadley
F. E. Hagie
George R. Hays
R. L. Hiatt
Curtis R. Hoffman
E. E. Holland
C. J. Hufnagel
Gayle J. Hunt
George B. Hunt
M. F. Johnston
Paul S. Johnson
F. E. Keith
Jos. H. Kinsey
J. F. Klepfer
F. W. Krueger
S. C. Markley
Elwood J. Meredith
W. L. Misener
C. L. Poston
H. P. Ross
L. F. Ross
Richard Schillinger
W. R. Taylor
Horace Wanninger
Arthur J. Whallon
Mary Wickens
N. M. Wilson, member Daviess-Martin Co.
G. H. Wisener
M. W. Yencer

Centerville

W. M. Barton
Oliver P. M. Ford

Fountain City

Leon T. Cox

Milton

Edgar C. Denny

Hagerstown

William Miller, member Henry Co.

Dublin

Leslie Wilson

WELLS COUNTY

Bluffton

H. D. Brickley
Chas. E. Caylor
Harold D. Caylor
Trumau E. Caylor
Max M. Gitlin
O. G. Hamilton
C. H. Mead
George B. Morris
Allen C. Nickel

Tocsin

C. L. Blue

Ossian

E. W. Dyar
R. C. Wybourn

Liberty Center

Chas. M. Gingerick

Zanesville

J. L. McBride

WHITE COUNTY

Monon

George R. Clayton
S. E. McClure, member Tippecanoe Co.
R. R. Richardson, member Tippecanoe Co.

Monticello

John C. Carney, member Tippecanoe Co.
H. B. Gable

Brookston

Charles J. Brockway, member Tippecanoe Co.
G. L. Derhammer, member Tippecanoe Co.

Wolcott

W. A. Spencer, member Tippecanoe Co.

WHITLEY COUNTY

Columbia City

Otto F. Lehmberg
E. V. Nolt
Benj. F. Pence

South Whitley

P. A. Garber
Verlin Park Huffman
J. H. Sowers
W. Ernest Wilkin

Churubusco

J. H. Briggs
E. A. Hershey

Larwill

L. W. Tennant

MEMBERS RESIDING OUTSIDE OF INDIANA

E. G. Becker, Convoy, Ohio ..... Allen
C. G. Beckett, Danville, Ill. ..... Fountain-Warren
W. E. Borley, Half Moon Bay, Calif. ..... St. Joseph
Robert M. Campbell, Oak Park, Ill. ..... Tippecanoe
Ione Clayton, Arkansas City, Ark. ..... Carroll
Lafayette T. Cox, National Home, Wis. ..... Ripley
A. J. Cramp, Chicago, Ill. ..... Porter
H. M. Crow, Morgantown, W. Va. ..... St. Joseph
L. L. Culp, White Earth, Minn. ..... Allen
Herbert E. Dester, Basna via Raigarh, C. P., India ..... Marion
Joseph Diamondstein, Calumet City, Ill. ..... Lake
J. F. Dinnen, Cleveland, Ohio ..... Allen
C. A. Dresch, Cassopolis, Mich. ..... St. Joseph
Jas. W. Duckworth, Fort Benning, Ga. ..... Marion
Edw. D. Gibson, Benham, Ky. ..... Scott
John E. Graf, Chicago, Ill. ..... Marion
H. W. Greist, Point Barrow, Alaska ..... White
William H. Hawley, College Corner, Ohio ..... Wayne-Union
Claude D. Holmes, Fort Thomas, Ky. ..... Marion
W. R. Hurst, Pasadena, Calif. ..... Vanderburgh
Peter Knoefel, Louisville, Ky. ..... Vigo
Catherine E. Logan, Chicago ..... Tippecanoe
Amy Littig, Madison, Wis. ..... Grant
F. C. Mann, Rochester, Minn. ..... Marion
E. L. Mock, Leavenworth, Kans. ..... Knox
F. T. Moore, Ann Arbor, Mich. ..... Delaware-Blackford
E. S. Olson, Aspinwall, Pa. ..... Lake
Minerva B. Pontius, Ann Arbor, Mich. ..... Vanderburgh
Frances J. Price, Cleveland, Ohio ..... Grant
C. H. Ruch, Momence, Ill. ..... Jackson
William B. Sigmund, Asheville, N. C. ..... Marion
Lorin W. Smith, Elmhurst, Ill. ..... Wabash
John Sprague, Rutland Heights, Mass. ..... St. Joseph
A. B. Thompson, Veterans Administration, Wis. ..... Spencer
G. T. Willke, Cincinnati, Ohio ..... Noble
O. E. Wilson, Sturgis, Mich. ..... Elkhart

MEMBERSHIPS REPORTED SINCE NOVEMBER 13, 1935

S. L. Brown, Hammond ..... Lake
A. D. Burge, Marion ..... Grant
H. W. Detrick, Hammond ..... Lake
A. W. Hadley, Maywood ..... Marion
R. S. Henry, Indianapolis ..... Marion
Ardes F. Melloh, Indianapolis ..... Marion
F. H. Mervis, East Chicago ..... Lake
William C. Mount, Kirklin ..... Clinton
G. H. Springstun, Oaktown ..... Knox
J. M. Zivich, East Chicago ..... Lake

MEMBERS BY TRANSFER

C. W. Rutherford, Indianapolis ..... Marion
H. L. Sedam, Indianapolis ..... Marion
Anna Grace Seyler, Indianapolis ..... Marion
J. Thornwell Witherspoon, Indianapolis ..... Marion

1936
MEMBERSHIP
DUES
Are Payable Now

AVOID DELINQUENCY
GET YOUR RECEIPT BY
JANUARY 1, 1936

DIPHTHERIA DEATHS FOR OCTOBER, 1935

There were twenty deaths from diphtheria in Indiana during the month of October. This brings the total up to eighty-two deaths for the year, which is two more than for the corresponding period last year. Nine new counties entered the list, namely, Howard, Franklin, Jasper, Jennings, Knox, Martin, Montgomery, Pike, and Porter counties. Of these new counties, Pike reports two deaths. Monroe County had three deaths during October, bringing the total for that county up to five for the year. Jackson County reported one death, bringing its total to six. These counties undoubtedly have the highest death rates. Marion County, with seven deaths, is far above what might be expected, for this is the same total as it had for the entire year during 1934.

Again we should like to remind the profession that diphtheria is a serious peril to the children of Indiana, and we shall have to be very busy if we are able to show a decline over last year.

A list showing distribution of the deaths for the year and for the month of October, 1935, follows:

County	No. Deaths Oct., 1935	Total for 1935
Allen	1	8
Bartholomew	0	1
Blackford	0	1
Boone	0	2
Brown	0	1
Clinton	0	1
Crawford	0	1
Dearborn	0	1
Dekalb	0	1
Delaware	0	1
Elkhart	0	2
Grant	0	2
Howard	1	1
Fayette	0	1
Fountain	1	1
Jackson	1	6
Jasper	1	1
Jefferson	0	1
Jennings	1	1
Lawrence	0	4
Lake	2	3
Knox	1	2
Madison	0	1
LaPorte	1	2
Marion	2	17
Martin	1	1
Monroe	3	5
Montgomery	1	1
Pike	2	2
Porter	1	1
St. Joseph	0	2
Spencer	0	1
Steuben	0	1
Tippecanoe	0	2
Vigo	0	1
Wayne	0	1
Warrick	0	1
Total	20	82

THURMAN B. RICE, M. D., Chairman,
Diphtheria Prevention Committee.

Under the Capitol Dome

HUNTING AND TULAREMIA

With the opening of the hunting season, Dr. Verne K. Harvey, director of the state department of public health, is asking the cooperation of Indiana physicians to prevent the spread of tularemia.

"The dissemination of information by physicians through whatever means they have at hand would, I feel, be beneficial in holding down the incidence of tularemia," Dr. Harvey said. "Physicians could do so by calling the attention of their patients to the seasonal increase at this time of year and urging certain procedures with which they are familiar in prevention of disease.

"Some of these points are: wearing rubber gloves when dressing wild rabbits; thorough cooking of the animal; the danger of using animals that are in any way below par physically," Dr. Harvey continued.

Statistics on the disease reported in Indiana showed:

1930—13 cases and 3 deaths.
1931—16 cases and 5 deaths.
1932—18 cases and 5 deaths.
1933—9 cases and 2 deaths.
1934—1 case and 3 deaths (see explanation below).
1935—3 cases and 1 death.

Dr. Harvey explained that the number of cases reported is not reliable, because many cases have not been reported. On the other hand the death rate is reliable because the report in that case is compulsory.

The health department runs a considerable number of examinations; all typhoid specimens are run for tularemia between October and March. Only one positive case has been run thus far this season, Dr. Harvey said.

* * *

STATE HOSPITALS OVER-CROWDED

The Madison State Hospital and the Logansport State Hospital, institutions for the care and treatment of the insane, both are crowded beyond their normal capacities, according to their annual reports submitted to Governor Paul V. McNutt.

The Logansport hospital which has a normal capacity of 1,340 patients, reported 1,602 under treatment at the close of the fiscal year last June 30. The Madison hospital had 1,636 patients on the same date, while its normal capacity is only 1,580.

Trustees of the Madison institution reported that notwithstanding their policy of placing patients on

furlough as promptly as conditions justify, it is anticipated that it will be necessary to continue to suspend many cases.

Overcrowding at the Logansport hospital is quite marked, according to the trustees' report. "This means that each patient does not have the air and light space that he or she should have; rooms that were originally designed for single bedrooms now have two beds, and in some instances three beds. With such crowded conditions it is impossible to get the maximum benefit from hospitalization," the report stated.

The average daily attendance at Logansport hospital during the past year was 1,585.8 and at Madison it was 1,618.7.

The report placed a valuation of $1,891,908.38 on the land, buildings and equipment at the Logansport institution, and $2,293,989.17 on the Madison property.

* * *

AUTOMOBILE ACCIDENTS

More than eighty per cent of the automobile accidents on state highways during the last fiscal year, which closed June 30, were caused by collision either with another vehicle, a person, or fixed object, according to state highway commission figures.

Only 223 of the 1,861 accidents were not collisions of one kind or another.

According to James D. Adams, highway commission chairman, only in eleven instances did the driver have a physical defect, so far as could be learned.

The highway commission's statistics showed a decrease in the number of accidents from the 1934 figure which was 2,014. A total of 1,001 accidents last year involved collision of two motor vehicles as compared with 1,014 in the preceding year and only 367 in the year before that. Accidents in which automobiles collided with a fixed object totaled 466 as compared with 399 the year before and 147 in 1933.

* * *

The nutrition problem among Indiana's poor this winter will be at least partly solved as a result of activities of the garden and conservation division of the Governor's Commission on Unemployment Relief.

More than four and a half million quarts of vegetables will be canned for winter consumption by relief clients. This represents the work being done at fifty-one canning centers in the state and in private relief homes. All the vegetables were from the gardens sponsored by the commission. There were 127,210 individual gardens tilled by relief clients who received seeds provided by the commission. Glass jars were supplied also. In addition there were fifty-five mass garden projects in fifty-five counties. Canning centers were set up in forty-nine counties to serve these gardens.

SECRETARIES' COLUMN

Now is the time for each county medical society in the state to consider the fact that next year, 1936, is an election year. In considering this fact, I believe that each county society should try and have a doctor on the ticket, regardless of political faith, especially for the offices of county council, state representative, and state senate. You should realize that under the present changing conditions of this country, it has become necessary for the doctors to be politicans as well as doctors. Talk about it, think about it, and do something about it. The future depends upon the willingness and action of each county medical society. Try to do your part.

The American Medical Association has a lecture, motion pictures, etc., on physical therapy, available for county medical society meetings. It is very interesting, and shows what can and what can not be done with physical therapy. I believe that you should consider it for one of your meetings. Write to Dr. H. A. Carter, c/o American Medical Association, 535 North Dearborn Street, Chicago, for details.

The health education show staged in Vigo County for the public was a success. About two thousand attended. I believe the idea should be carried out by other county societies. This is a better show than the town hall meetings advocated by some of the national health organizations.

An organization called the Rangers may solicit members of your society. They have a connection with an insurance company in Anderson and sell memberships in the order, and with them sell doctor's care for their members. Each member is supposed to name his physician at the time of taking out his membership. The doctor is offered fifty cents a quarter for every member that has used his name. The physician is paid this whether he does anything or not. I understand that it is an organization of social credit based on the political group in Alberta, Canada.

In Ohio they are advocating courses in the medical schools in economics, ethics, and medical law as a part of the regular medical course. These courses should be taught and should start in the freshman year. What is your opinion?

Remember the annual secretaries' conference. The date is February 2, 1935. Time, 1:30 p. m. Place, Columbia Club, Indianapolis. Dinner at 6:00 p. m.



DEATH NOTICES

HERBERT E. WOODBURY, M. D., of Indianapolis, died October twenty-ninth, aged sixty-six years. Dr. Woodbury had been with the department of medical therapeutics of the Eli Lilly and Company since 1927. He graduated from the Harvard University Medical School in 1899.

MAURICE BUCHSBAUM, M. D., of Gary, died in a Chicago hospital, October twenty-fourth. Dr. Buchsbaum was born in Hungary in 1867, and came to this country in 1891. He graduated from Rush Medical College, Chicago, in 1905. He was a member of the Lake County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

CHARLES W. STOLZER, M. D., of New Albany, died October fourteenth, aged seventy-three years. Dr. Stolzer graduated from the Central College of Physicians and Surgeons, Indianapolis, in 1904, and was a former member of the Floyd County Medical Society and the Indiana State Medical Association. He retired from active practice in 1931.

OTIS A. SWEET, M. D., of Eminence, died October twenty-fourth, aged fifty-seven years. Dr. Sweet graduated from the Medical College of Indiana, Indianapolis, in 1903.

FRANKLIN F. MENDENHALL, M. D., of Fishers, died October twenty-fourth. Dr. Mendenhall was seventy-five years of age. He had retired from active practice. Dr. Mendenhall graduated from the Medical College of Indiana, Indianapolis, in 1898.

JACOB P. TETER, M. D., of Indianapolis, died October twenty-seventh, aged sixty-five years. Dr. Teter graduated from the Physio-Medical College of Indiana, Indianapolis, in 1906.

WILLIAM H. NEWLIN, M. D., of New London, died October twenty-seventh, aged seventy years. Dr. Newlin had retired from active practice. He was an honorary member of the Howard County Medical Society and the Indiana State Medical Association. He graduated from the Eclectic Medical College of Cincinnati in 1890.

LESTER B. RHAMY, M. D., of Wabash, died November nineteenth, at Rochester, Minnesota, where he had been receiving treatment. Dr. Rhamy was thirty-six years of age and had been practicing in Wabash for about five years. He was a member of the Wabash County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. Dr. Rhamy graduated from the Indiana University School of Medicine, Bloomington and Indianapolis, in 1928.

PHINEAS B. CARTER, M. D., of Macy, died November nineteenth, aged sixty-one years. Dr. Carter was a member of the Fulton County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Illinois Medical College, Chicago, in 1905.

ADAM LAWRENCE SCHNEIDER, M. D., of Fort Wayne, was instantly killed November fifth when struck by an automobile. Dr. Schneider was sixty-three years of age. He was a former president of the Fort Wayne Board of Health, and a former president of the staff of the Fort Wayne Lutheran Hospital, where he also had been an instructor in the nurses' training school. Dr. Schneider graduated from the Fort Wayne College of Medicine in 1898 and practiced in Fort Wayne since that time. He was a member of the Fort Wayne Medical Society and the Indiana State Medical Association, and was a Fellow of the American Medical Association.

WILLIAM O. MCBRIDE, M. D., opthalmologist and otolaryngologist of Fort Wayne, died November fifth, aged fifty-eight years. Dr. McBride started his practice in Fort Wayne in 1913, and since 1922 had been connected with the Duemling Clinic. He was an instructor in the Lutheran Hospital Nurses' Training School, and was a former president of the staff of the Lutheran Hospital. He was the author of a textbook, "Anatomy and Diseases of the Eye, Ear, Nose and Throat for Nurses." Dr. McBride graduated from the Northwestern University Medical School, Chicago, in 1903, and was a member of the Fort Wayne Medical Society, the Indiana State Medical Association, the American Medical Association, and the American Academy of Ophthalmology and Otolaryngology.

C. NORMAN HOWARD, M. D., ophthalmologist and otolaryngologist of Warsaw, died November eleventh, aged fifty-nine years. Dr. Howard had practiced his specialty in Warsaw for twenty-eight years, and had occupied many official positions in the county and state medical organizations. He served as a captain during the World War, and was stationed at Walter Reed Hospital in Washington. Dr. Howard graduated from the George Washington University School of Medicine, Washington, D. C., in 1898, and was a member of the American Academy of Ophthalmology and Otolaryngology, the American Board of Ophthalmology, and the American Board of Otolaryngology, the Kosciusko County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association. Resolutions of the Kosciusko County Medical Society are published under "Societies and Institutions" in this issue of THE JOURNAL.

HOOSIER NOTES

MISS HELEN GLOVER of Bedford and Dr. Donald Creel of Angola were married in Angola, October twenty-third.

MISS MARJORIE MAE SPENCER of Indianapolis, and Dr. C. V. Rozelle of Anderson were married in Indianapolis, November ninth.

DR. L. J. GARRISON has moved from Indianapolis to Marion where he has opened offices in the Marion National Bank Building.

DR. T. E. CARNEAL of Winamac has remodeled his office building so that it is now a four-bed hospital.

DR. W. F. EDWARDS of New Albany was elected president of the New Albany Kiwanis Club at the November seventh meeting.

THOMAS L. COOKSEY, M. D., of Crawfordsville, has announced that he will be a candidate for Congress, Sixth District, on the Republican ticket.

THE INDIANA STATE CONFERENCE on Social Work and affiliated organizations was held in Indianapolis, November sixth, seventh and eighth.

MEMBERS of the auxiliary to the Marion County Medical Society met November first at the Methodist Hospital Nurses' Home. Dr. John G. Benson was the principal speaker.

DR. CATHERINE E. LOGAN who has conducted a general medical practice in Monticello, has moved to Chicago where she has accepted a position as assistant to Dr. Eugene Traut.

DR. FRED C. DENNY, eye, ear, nose and throat specialist, has moved to Greensburg from Madison. Dr. Denny will take over the practice of the late Dr. D. W. Weaver. He will spend one day of each week in Madison.

DR. JAMES F. BALCH of Indianapolis was placed upon the honor list at the American Surgeons Convocation in San Francisco last month. Five candidates from the class are selected each year, and we extend our congratulations to Dr. Balch.

THE Evansville Post-Graduate Group met at the Vendome Hotel in Evansville, October twenty-second, to hear Dr. Robert M. Moore of Indianapolis talk on "Prognosis of Heart Disease."

ELECTION of officers for Hendricks County Medical Society:

President, Dr. Milo Aiken, Plainfield.
Vice-president, Dr. Carl Parker, Danville.
Secretary, Dr. W. T. Lawson, Danville.

DR. IRA PERRY of North Manchester was elected councilor of the Eleventh District to fill the unexpired term of Dr. George D. Miller. The Eleventh District Society held its meeting at Peru, October thirtieth.

W. U. KENNEDY, M. D., of Newcastle, president of the Henry County Medical Society, is spending considerable time in Europe. A message sent from Brussels advises that he is gathering some interesting data regarding state medicine.

E. R. SQUIBB AND SONS is joining the World Peaceways in a new series of weekly radio broadcasts, in an effort to stimulate public interest in the ideal of world peace. The program, "To Arms for Peace" is being broadcast by stations of the Columbia network.

THE INDIANA CONFERENCE of the Catholic Hospital Association held its twelfth annual convenvention, October twenty-second and twenty-third, in St. Margaret's Hospital, Hammond. Convention speakers included Dr. E. M. Shanklin of Hammond, Dr. Austin Hayden of Chicago, and Dr. H. W. Detrick, Hammond.

DR. WILLIAM MOORE of Muncie addressed members of the Bluffton Rotary Club in Bluffton, October twenty-ninth. Modern methods of treatment of certain bone and flesh ailments by the use of maggots was discussed and demonstrated by motion pictures.

DR. R. N. HARGER, professor of biochemistry and toxicology of the Indiana University Medical School, addressed the Indianapolis Society of Clinical Laboratory Technicians, November twenty-first. His subject was "Some Tests for Poisons Suitable for a Clinical Laboratory." Indianapolis pathologists were guests at the meeting.

MR. ALBERT STUMP, attorney for the Indiana State Medical Association, addressed the November eleventh meeting of the National Association of Women in Indianapolis, on the subject of "Should the State Engage in the Practice of Medicine?"

DR. HAMILTON ROW, eye surgeon of Indianapolis, has been selected as one of five eye surgeons to take charge of an eye clinic at Shikarpur, Baluchistan, India, and sailed November first for his post. He will spend several months in the clinic at Shikarpur where, because of the climate which is unfitted through most of the year for Europeans, most of the activities of the hospital are carried on during January and February.

PROFESSOR GEORGES PORTMANN will conduct an intensive five weeks course in otorhinolaryngology in the University of Bordeaux, France, beginning July 30, 1936. Didactic laboratory, clinical and operative instruction will be presented in the English language. Any one interested may address Dr. James A. Flynn, 1511 Rhode Island Avenue, N. W., Washington, D. C.

THE second annual conference of the Indiana State Medical Record Librarians' Association was held at the Columbia Club, November eleventh. Principal Speakers were Dr. Carl McCaskey, Dr. A. F. Weyerbacher, and Dr. H. F. Beckman, all of Indianapolis. Miss Grace Bartle, of Indianapolis was named president; Miss Mary O'Connor, Indianapolis secretary-treasurer; and Mrs. Grace Austin, Muncie, chairman of the program committee.

THE VIGO COUNTY MEDICAL SOCIETY sponsored a three-day health educational exhibit at Terre Haute, October 30, 31, and November 1. The program included talks on heart disease, skin diseases, automobile accidents, dangerous cosmetics and drugs, health habits, and common contagious diseases of childhood. Demonstrations and talks illustrated with moving pictures were presented for the lay attendants. Speakers included Drs. George S. Bond, F. M. Gastineau, M. N. Hadley, J. W. Jackson, J. H. Stygall, and H. B. Mettel, all of Indianapolis.

THE 135th semi-annual meeting of the Union District Medical Association was held October twenty-fourth at the Richmond-Leland Hotel, Richmond, with approximately fifty physicians in attendance. Speakers were Dr. Mark Millikin, Hamilton, Ohio; Dr. Karl G. Zwick, Cincinnati; Dr. W. D. Haines, Cincinnati; Dr. G. H. Weisner, Richmond; and Dr. J. O. Ritchey, Indianapolis. Dr. Edward Bauer of Middletown, Ohio, was elected president; Dr. F. E. Hagie, Richmond, vice-president; and Dr. E. C. Denny, Milton, secretary-treasurer. The next meeting of the organization will be held on the fourth Thursday of April, 1936, in Newcastle, Ind.

THE United States Civil Service Commission announces open competitive examination for Principal Medical Officer (Bacillin Calmette-Guerin), applications for which position must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than December 9, 1935. Open competitive examinations also have been announced for Children's Bureau Positions, for the position of director, Division of Maternal and Child Health, and director, Crippled Children's Division, applications for which must be on file at Washington, D. C., not later than December 9, 1935. Full information may be obtained from the secretary of the United States Civil Service Board of Examiners at the post office or customhouse in any city which has a post office of the first or the second class, or from the U. S. Civil Service Commission, Washington, D. C.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Health Products Corporation

- White's Cod Liver Oil Concentrate (Liquid)
- White's Cod Liver Oil Concentrate Capsules, 3 minims
- White's Cod Liver Oil Concentrate (Liquid) Vials, 50 cc.

Hoffmann-LaRoche, Inc.

- Larocaine Hydrochloride

Lederle Laboratories, Inc.

- Cod Liver Oil Concentrate Liquid (Lederle)
- Cod Liver Oil Concentrate Liquid (Lederle) Vials, 5 cc.
- Cod Liver Oil Concentrate Liquid (Lederle) Capsules, 3 minims
- Diphtheria Antitoxin "Globulin-Lederle-Modified"
- Erysipelas Streptococcus Antitoxin "Globulin-Lederle-Modified"
- Tetanus Antitoxin "Globulin-Lederle-Modified"

Wm. S. Merrell Company

- Ampoules Solution Dextrose 50%, 20 cc.
- Ampoules Solution Dextrose 50%, 50 cc.

Parke, Davis & Co.

- Diphtheria Toxoid—P. D. & Co., one 0.5 cc. Vial Package
- Diphtheria Toxoid—P. D. & Co., one 5 cc. Vial Package
- Diphtheria Toxoid, Alum Precipitated—P. D. & Co., one 0.5 cc. Vial Package
- Diphtheria Toxoid, Alum Precipitated—P. D. & Co., one 5 cc. Vial Package

E. R. Squibb & Sons

- Iodobismitol with Salignenin (Squibb)

INDIANA UNIVERSITY NEWS NOTES

A collection of surgical instruments which were used by Dr. Joseph Lorain Gilbert of Kendallville have been given to the Indiana University Medical Museum by his daughters, Mrs. Samuel L. Shank and Miss Clara Gilbert of Indianapolis. Surgical needles, a mahogany case of surgical instruments, a rare copy of the second American edition of Gray's Anatomy and a copy of Samuel D. Gross' Lives of Eminent American Physicians and Surgeons of the Nineteenth Century are included in the collection.

A tourniquet of the Civil War period has been received from E. C. Clark of the Akron Surgical House, Indianapolis.

Librarian Allan Hendricks reports that the medical museum is growing steadily through contributions of books and instruments which have great historical value and serve to illustrate the work of pioneers in Indiana medicine during the past century.

A portrait of "The Doctor" whom James Whitcomb Riley immortalized in his poem by that name has been presented to the Indiana University Medical Center and has been hung in the reading room of the medical library.

Dr. William B. Fletcher, subject of the painting by Theodore C. Steele, was at one time condemned and sentenced to be shot. That was during the Civil War, in which he served as a scout. He was captured near Big Spring, Va. He succeeded in destroying his notes and maps by lighting his pipe with them while seated near a camp fire. Later he made two unsuccessful attempts to escape. Finally, his identity as a condemned prisoner was lost and by mistake he was sent to Libby prison. There he was put in charge of the gangrene prison and later paroled.

Dr. Fletcher served for more than 40 years as a neurologist and as a teacher in the old Indiana Medical College and the College of Physicians and Surgeons in Indianapolis. He died in 1907.

Miss Lute Troutt, chief dietitian of the Indiana University hospitals in Indianapolis, was elected president of the American Dietetic Association at its annual meeting October 28-31 in Cleveland, Ohio. Miss Troutt has been first vice-president of the association during the past year, and prior to that time was chairman of the Diet Therapy Section. Miss Katherine Mitchell, dietitian of the Michael Reese Hospital, Chicago, is the retiring president.

In addition to Miss Troutt, the following members of the I. U. staff attended the Cleveland meeting: Mrs. Virginia Kraning, administrative dietitian; Miss Jean Crooks, therapeutic dietitian, and Miss Ruth Darby, instructor in nutrition.

SOCIETIES AND INSTITUTIONS

CORRECTION

In the minutes of the Section on Surgery of the Indiana State Medical Association, as published on page 636 in the November issue, discussant for Dr. E. B. Mumford's paper published as E. C. Davidson, Lafayette, should have been William R. Davidson, Evansville.

COUNTY SOCIETY REPORTS

ADAMS COUNTY MEDICAL SOCIETY conducted a free clinic for skin disorders at Decatur, November eighth. Dr. W. W. Duemling of Fort Wayne aided in conducting the clinic. The next meeting will be held December thirteenth, when officers will be elected.

* * *

ALLEN COUNTY (FORT WAYNE) MEDICAL SOCIETY members, at a meeting October twenty-ninth, unanimously voted to adopt a plan by which the society will take over the care of the indigent sick in Wayne Township. If the plan as outlined is accepted by the trustee, it will go into effect December first. It provides for payment to the medical society as a whole, and permits patients to have their own family physicians.

On October thirtieth, members of the Allen County Society attended a joint meeting with the St. Joseph County Medical Society at the LaSalle Hotel, South Bend. This was the second joint gathering of the two organizations. Principal speaker at the meeting was Dr. A. R. Barnes of the Mayo Clinic.

* * *

CARROLL COUNTY MEDICAL SOCIETY met October seventeenth, in Delphi. Dr. J. O. Ritchey of Indianapolis was the principal speaker.

CARROLL COUNTY MEDICAL SOCIETY met at Camden, November fourteenth. Dr. Arthur Riehter of Chicago presented a discussion of the four major types of heart disease. Attendance numbered ten.

At the October tenth meeting of the Carroll County Medical Society, Dr. J. O. Ritchey of Indianapolis discussed "Nontuberculous Chest Infections." Attendance numbered fifteen.

* * *

FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY held a regular monthly meeting at the McFarlan Hotel, Connersville, November twelfth. Dr. R S. Sappenfield of Brookville was the prineipal speaker.

* * *

FLOYD COUNTY MEDICAL SOCIETY members met in New Albany, October twenty-fifth, to hear Dr. Virgil Simpson of Louisville talk on "The Heart and Its Diseases."

* * *

GIBSON COUNTY MEDICAL SOCIETY met at Princeton, October fourteenth, to hear Dr. C. O. McCormick of Indianapolis discuss "Various Procedures Used in Deliveries." Attendance numbered twenty-two.

Gibson County Medical Society met at the Hotel Emerson, Prineeton, November fourth. Dr. Charles N. Combs of Terre Haute talked on "Late Developments in Anesthesia." The next meeting will be held December ninth, when officers will be elected.

* * *

GREENE COUNTY MEDICAL SOCIETY met at the Freeman-Greene County Hospital, in Linton, October seventeenth, with Dr. Morton L. Lillie of Jasonville as prineipal speaker.

* * *

HAMILTON COUNTY MEDICAL SOCIETY met at Areadia, October eighth, with Dr. Matthew Winters of Indianapolis as principal speaker. Dr. Winters' subject was "Searlet Fever and Nephritis."

HENDRICKS COUNTY MEDICAL SOCIETY members met at Danville, October twenty-fifth, for a business meeting and election of officers as follows: President, Milo Aiken, Plainfield; Vice-president, Carl Parker, Danville; Secretary, W. T. Lawson, Danville.

* * *

HENRY COUNTY MEDICAL SOCIETY members met October twenty-fourth, at the Henry County Hospital. Dr. L. G. Zerfas of Indianapolis presented a paper on "Nutritional and Deficiency States." Attendance numbered fifteen.

* * *

HOWARD COUNTY MEDICAL SOCIETY met November eighth at the Courtland Hotel, Kokomo, for their regular monthly dinner and business session. Dr. J. T. Witherspoon of Indianapolis presented a paper on "Internal Glandular Therapy."

* * *

HUNTINGTON COUNTY MEDICAL SOCIETY met at the Hotel Lafontaine, October first. Dr. Frank Gastineau of Indianapolis talked on "Common Skin Diseases."

* * *

INDIANAPOLIS (MARION COUNTY) MEDICAL SOCIETY met at the Athenaeum, October twenty-ninth, when papers on the general subject of "Toxemias of Late Pregnancy" were presented by Drs. H. F. Beckman, G. W. Gustafson, and John E. Dalton.

At the October twenty-second meeting, Dr. Henry Alburger spoke on "What Happens After Death." On November fifth, Dr. George J. Garceau presented a paper and lantern demonstartion on "Backache."

At the November twelfth meeting of the Indianapolis Medical Society, Dr. Paul D. White of Boston presented an address on "Diseases of the Heart." Dr. White conducted a clinic at the Indianapolis City Hospital in the afternoon.

* * *

JAY COUNTY MEDICAL SOCIETY met at the Portland Country Club, November first. Dr. Louis H. Segar of Indianapolis talked on "Present Trend in Pediatrics."

* * *

LAKE COUNTY MEDICAL SOCIETY members met at St. Margaret's Hospital, November fourteenth, for "Indiana University night," with speakers W. D. Gatch, J. H. Warvel, and George S. Bond, all of Indianapolis.

* * *

LAWRENCE COUNTY MEDICAL SOCIETY members met at the Greystone Hotel, Bedford, in November, when four Louisville physicians, Dr. Virgil Simpson, Dr. James Pritchett, Dr. R. T. Hudson, and Dr. Will Allen, discussed the various phases of infantile paralysis. A round-table discussion followed presentation of the addresses.

* * *

MADISON COUNTY MEDICAL SOCIETY members and their wives were guests at a social event known as the "Fall Creek Frolic" at Pendleton, October twenty-first. Preceding the social time, the physicians held their regular monthly scientific meeting, with Dr. Vincent A. Lapenta of Indianapolis as speaker, his subject being "Indications for Blood Transfusions."

MADISON COUNTY MEDICAL SOCIETY members had a dinner meeting at St. John's Hospital, November eighteenth. Dr. Fred B. Wishard of Anderson was the principal speaker.

* * *

MARSHALL COUNTY MEDICAL SOCIETY met at Plymouth, October second. Dr. R. C. Stephens talked on "Typhoid Fever." Attendance numbered fourteen.

* * *

MONTGOMERY COUNTY MEDICAL SOCIETY met at Culver Hospital, Crawfordsville, October twenty-fourth, with Dr. Paul K. Cullen of Indianapolis as principal speaker. Dr. Cullen's subject was "Rectal Diseases in General Practice." Attendance numbered twenty-six.

* * *

MUNCIE ACADEMY OF MEDICINE members met in the Hotel Roberts, Muncie, October first, to hear Dr. Harold F. Dunlap of Indianapolis discuss "Diagnosis and Treatment of Hyperthyroidism."

At the October twenty-ninth meeting, Dr. Craig D. Cutler of Chicago spoke on "Treatment of the Newborn."

MUNCIE ACADEMY OF MEDICINE met in Muncie, November fifth, to hear Dr. Byrl R. Kirklin of the Mayo Clinic talk on "Some Medical Roentgenological Diagnostic Problems."

At the November twelfth meeting of the Muncie Academy of Medicine, Dr. Henry John of Cleveland discussed "The Treatment of Diabetes."

* * *

NOBLE COUNTY MEDICAL SOCIETY met at Albion, November sixteenth. Speakers were Dr. M. B. Catlett and Dr. E. M. Van Buskirk of Fort Wayne, and Dr. D. G. Mertz (dentist) of Fort Wayne.

* * *

RANDOLPH COUNTY MEDICAL SOCIETY held its November meeting, November eleventh, at Winchester. Dr. William E. King of Indianapolis presented a paper on "Upper Abdominal Pain."

* * *

SHELBY COUNTY MEDICAL SOCIETY members and representatives from Hancock, Rush, Decatur, and Johnson counties attended a meeting of the society in Shelbyville, November sixth, and heard Dr. E. D. Clark of Indianapolis, who discussed "Appendicitis." Attendance was approximately forty.

* * *

ST. JOSEPH COUNTY MEDICAL SOCIETY met at the Children's Dispensary, South Bend, August twenty-fifth, to hear Dr. R. L. Sensenich talk on "Medical Economics." This was the first fall meeting.

On October first, members of this society met at the Children's Dispensary to hear Dr. J. M. Gordon speak on "Rheumatic Heart Disease." Twenty-nine members and one guest attended.

At the October fifteenth meeting of the St. Joseph County Medical Society, Dr. L. Faltin of South Bend presented a paper on "Syphilis of the Heart." Twenty-one members and four guests were present.

At the October twenty-second meeting, Dr. R. W. Spenner of South Bend talked on "Hypertensive Heart Diseases." Twenty members and five guests attended.

St. Joseph County Medical Society and members from the Fort Wayne Medical Society held a joint meeting at the LaSalle Hotel in South Bend, October thirtieth, when Dr. A. R. Barnes of the Mayo Clinic talked on "Diseases of the Coronary Arteries."

On November fifth, the St. Joseph County Medical Society met in South Bend to hear Dr. Paul Haley discuss "Physiology of the Ductless Glands." Attendance numbered twenty-one.

* * *

TIPPECANOE COUNTY MEDICAL SOCIETY members met at the Lafayette Home Hospital and Presbyterian Education Building, Lafayette, October fifteenth. Dr. Burt Caldwell of the American Hospital Association discussed "Responsibilities of Hospitals and Professions" and "The Hospital Serves." Rev. T. F. Williams spoke on "The Hospital as a Community Center," discussing the matter from the citizen's viewpoint. Attendance numbered sixty.

TIPPECANOE COUNTY MEDICAL SOCIETY met at the Home Hospital for a clinic and at Lincoln Lodge, Lafayette, for dinner, November twelfth. Dr. Clifford G. Grulee of Chicago talked about "Anemia in Infancy." Attendance numbered sixty.

* * *

TRI-COUNTY MEDICAL SOCIETY met at Seymour, November thirteenth. Dr. W. E. Pennington of Indianapolis presented a paper.

* * *

VIGO COUNTY MEDICAL SOCIETY met at St. Anthony's Hospital, Terre Haute, September tenth. Dr. O. T. Allen and Dr. W. S. Kunkle were principal speakers. Attendance numbered forty-nine.

VIGO COUNTY MEDICAL SOCIETY members met at Union Hospital, Terre Haute, October first. Dr. M. C. Topping of Terre Haute talked on "Results of Treatment in Congential Hip Deformity." Attendance numbered fifty-four. This was a joint meeting with the Fifth District Society. Offieers were elected for 1936 as follows:

Dr. E. H. Dowell, Rockville, president.
Dr. A. W. Cavins, Terre Haute, vice-president.
Dr. James Richart, Terre Haute, secretary-treasurer.

A resolution was passed opposing the speed of ambulances and the noise made by their sirens.

* * *

WAYNE-UNION COUNTY MEDICAL SOCIETY met in Richmond, November fourteenth, to hear Dr. Nelson Percy of Chicago talk on "Operations on Superior Hypogastric Plexes of the Sympathetic Nervous System." Attendance numbered forty.

INDIANA STATE MEDICAL ASSOCIATION
BUREAU OF PUBLICITY

September 24, 1935.

Present: William N. Wishard, M. D., chairman; J. H. Stygall, M. D.; E. D. Clark, M. D.; and T. A. Hendricks, executive secretary.

Minutes of the meeting of August 16 signed. Minutes of the meeting of September 16 approved for signature.

The following relcases on the annual session were approved:
Saturday, September 28—General Story.
Sunday, Septemher 29—Program.
Wednesday, October 2—Entertainment.
Thursday, October 3—Special Features, Scientific and Commercial Exhibits.
Friday, October 4—Woman's Auxiliary.
Saturday, Octoher 5—Golf and Trap Shoot Story.
Wednesday Afternoon, October 9—President's Address.

Requests for Speakers:

October 30—Eleventh District Medical Society, Peru, Indiana.
November 6—Thirteenth District Medical Society, Rochester, Indiana. Speakers obtained.

Reports on Medical Meetings:

September 10—Fayette-Franklin County Medical Society, Connersville, Indiana. "Maternal Mortality in Fifteen States." 22 present.

September 10—Knox County Medical Society, Vincennes, Indiana. "Coronary Disease." 30 present.

Letter received in regard to medical cartoons that are appearing in the Williamsport, Pennsylvania, paper from physician at Williamsport who is doing this work.

Letter received from the secretary of the Sullivan County Medical Society in regard to the following resolution to be presented by the delegate of the Sullivan County Medical Society at the state meeting at Gary:

"Whereas: Jane Todd Crawford, by her courageous heroism, made possible the first ovariotomy, and

"Whereas: The body of Jane Todd Crawford lies buried in Sullivan County, and

"Whereas: We feel that some suitable monument should be erected at her grave;

"Therefore: We move that our Delegate to the Indiana State Medical Association be instructed to bring this matter before the House of Delegates and that he request the appointment at this time of a Committee to devise ways and means for a suitable memorial to Jane Todd Crawford."

The Bureau was instrueted to send the secretary of the Council on Physical Therapy of the American Medical Association a list of county society secretaries of the Indiana State Medical Association in answer to his recent letter in regard to the arrangement of "practical talks on physical therapy to be given before state, county, or other medical societies."

October 4, 1935.

Present: William N. Wishard, M. D., chairman; J. H. Stygall, M. D.; E. D. Clark, M. D.; and T. A. Hendricks, executive secretary.

The Bureau approved subscription to *Survey Graphic* for one year.

Copy of the new constitution and by-laws of the Randolph County Medical Society containing the "Prineiples of Medical Ethics" brought to the attention of the Bureau. The Bureau commends the Randolph County Society upon the inclusion of the "Principles of Medical Ethics" in its constitution and by-laws and hopes that all county societies will follow the example set by Randolph County.

Article, "The Sick Child at School," which appeared in the October issue of *The Indiana Parent-Teacher Bulletin*, reviewed by the Bureau.

October 25, 1935.

Present: William N. Wishard, M. D., chairman; J. H. Stygall, M. D.; E. D. Clark, M. D.; and T. A. Hendricks, executive secretary.

Release on "Sinus Trouble" read, corrected and approved for publication in Saturday papers, November 9.

The Bureau approved the suggestion that a newspaper release be prepared upon the fact that the Indiana State Medical Association and the American Medical Association are ready to supply material voicing the attitude of the profeesson upon the question of the socialization of medicine for the use of high school students in the preparation of debates.

Requests for speakers:

Fall or winter—County Tuberculosis Association of La-Porte desires speaker upon tuberculosis.

Octoher 30, 31-November 1—Vigo County Health Edueational exhibit. The following program for this meeting was arranged by the Bureau:

October 30—"Heart Disease, a Public Prohlem," 3:30 p.m. "Common Skin Diseases," 8:00 p.m.

Oct. 31—"Automobile Accidents as a Health Hazard," 3:30 p.m. "Cancer," 8:00 p.m.

Nov. 1—Talk to high school girls and boys. "Good Health Habits," 3:30 p.m. "Common Contagious Diseases of Childhood," 8:00 p.m.

The Bureau received and approved the suggested State Association and county society program for 1935 and 1936, prepared by the president-elect of the Association and approved by the House of Delegates. The Bureau of Publicity was unqualified in its approval and asked that the various county societies cooperate in carrying out this program.

Letter received from a physican in the southern part of the state enclosing an advertisement concerning a sanitarium which is run by cultists. The Bureau instructed the secretary to turn this matter over to the State Board of Medical Registration and Examination for investigation.

Letter received from the secretary of the Shelby County Medical Society asking the Bureau to supply articles concerning diphtheria immunization. These articles are to be used in connection with a campaign against diphtheria and smallpox that is to be carried on in Shelby county by the Ameriean Legion and the Shelby County Society. This request was referred for additional material to the director of the State Division of Public Health.

Request also received by the Bureau from an officer of the Bartholomew County Medical Society for material which might be used in a diphtheria immunization campaign that is being contemplated by the profession in Bartholomew county. The Bureau instructed the executive secretary to supply the material requested.

The following letter was received by the Burcau from the secretary of the American Medical Association in answer to a request concerning the opinion of the American Medical Association in regard to the so-called injection treatment of hernia:

"My opinion is that the so-called injection treatment of hernia has not met with the general approval of the medical profession. I have been informed by a number of surgeons that they do not regard that particular method of treatment as worthy of acceptance.

"I suggest that you confer with competent surgeons and that you base a reply to Mrs. ————'s letter on the opinions expressed by such surgeons. I am quite confident that you will find that very few, if any, outstanding surgeons approve the injection treatment for hernia."

The following letter was received from the president of the Indiana Casualty Adjusters Association:

"The undersigned as President of the Indiana Casualty Adjusters Association, an organization of casualty adjusters engaged in the handling of casualty claims in Indiana, has been directed to make inquiry of your Association concerning certain alleged objections that have been raised by your Association with reference to the appearance on our program of members of the medical profession for the purpose of discussing certain types of injuries and treatment therefor.

"Information concerning such criticism has come to us very indirect, but we understand that some physicians have in the past been criticized for addressing us on problems in which we were vitally interested and concerned.

"Bear in mind that we fully appreciate and recognize your right to govern your profession by such rules and regulations as you see fit, but we were at a loss to understand this criticism if there was any.

"In my own connection with the organization over the past nine or ten years, I can recall many instances where physicians have discussed problems with us and I cannot call to mind any one case where the discussion was anything but of a very ethical nature and certainly in no manner was tainted with any commercialism.

"Our association would appreciate very much your reaction to this letter, and thanking you in advance for a reply, we are . . ."

Following is the answer of the Bureau to this letter:

"Your letter of October 22 was brought to the attention of the Bureau of Publicity of the Indiana State Medical Association at its regular weekly meeting, Friday, October 25.

"In the second paragraph you say, 'Information concerning such criticism has come to us very indirect, but we understand that some physicians have in the past been criticized for addressing us on problems in which we were vitally interested and concerned.'

"You give no definite information or specific statement in your letter. If you desire the subject to be considered by the Bureau of Publicity it is necessary that you are specific and state facts and not rumors."

There being no further business the meeting was adjourned.

* * *

SEVENTH DISTRICT MEDICAL SOCIETY

The Seventh District Medical Society held its annual meeting, November twelfth, at the Indianapolis City Hospital in the afternoon, and at the Athenaeum in the evening. A business meeting and clinics were held in the afternoon, and in the evening, Dr. Paul D. White of Boston discussed "Cardiac Emergencies and Their Treatment." Officers for 1936 were elected as follows:

President, M. C. Pitkin, Martinsville.
Vice-president, J. Harold Grimes, Danville.
Secretary-treasurer, Russell Sage, Indianapolis.
Councilor, C. J. Clark, Indianapolis.

* * *

ELEVENTH DISTRICT MEDICAL SOCIETY

Approximately one hundred physicians attended the meeting of the Eleventh Councilor District, held in Peru, October thirtieth. Marion was selected as the place of meeting in the spring. Dr. Ira Perry of North Manchester was selected as councilor to succeed the late Dr. George D. Miller of Logansport. Officers are elected at the spring session.

THIRTEENTH DISTRICT MEDICAL SOCIETY

The annual meeting of the Thirteenth District Medical Society was held at Rochester, November sixth. Dr. Arthur L. Hertzler of Halstead, Kansas, spoke on "Office Management of Stomach Complaints," and other speakers were Dr. O. R. Yoder of Ypsilanti, Michigan; Dr. Aaron Arkin of Chicago, and Dr. George H. Gardner of Chicago. Officers were elected:

President, Dr. Mark M. Piper, Rochester.
Vice-president, Dr. R. H. Young, Goshen.
Secretary-treasurer, Dr. J. M. Fleming, Elkhart.
Councilor, Dr. W. B. Christophel, Mishawaka (re-elected).
The next meeting will be held in Elkhart.

CLINTON COUNTY MEDICAL SOCIETY

The Clinton County Medical Society met in regular session at the Coulter Hotel, Thursday evening, September 5, 1935, with the president, Dr. H. R. Royster, presiding.

At the suggestion of the president the reading of the minutes was omitted because of the lateness of the hour.

Dr. C. A. Robison was elected alternate delegate to the state medical society.

No further business appearing, the meeting was turned over to Drs. Craig and Rhorer, who presented the subject of "Pyloric Stenosis" from the medical and surgical standpoints. This subject was well discussed and all the points especially of interest to the diagnosticians were amply covered.

Clinton County Medical Society met in regular session at the Coulter Hotel, Thursday evening, October 3, 1935, with Vice-President Dr. C. A. Robison presiding.

A communication from Mr. Bynum Legg of the Division of Public Health was read and the reply of the secretary to the same, in which he affirmed our former stand, that is, that any program which asked for approval of the Clinton County Medical Society must first have the approval of the local men in the field. The society again indorsed this stand. We stand ready to help, but we must have the approval of the physicians directly concerned before approving any undertaking.

Dr. C. A. Robison, sponsor for the program, had requested the secretary to announce it as a surprise, and the first part of the surprise was the dinner at Dr. Robison's expense as he, before dinner, instructed the secretary to collect no money.

It was moved and seconded that the chair appoint a committee to meet with our county commissioners and renew our contract for poor relief. Dr. Robison appointed Drs. Beardsley, Chittick and Compton.

No further business appearing, the meeting was turned over to Dr. Robison who first presented a paper entitled "The Eye in Relation to General Practice." After a very thorough discussion of the points brought out by the essayist Dr. Robison presented a moving picture made during his trip to the city of Mexico the past summer. In this he showed us a great amount of the life and customs of the people in the districts through which he passed.

Among other things which were of interest was his picture of a bull fight which took place in the city of Mexico during the rotary convention.

A very sincere vote of thanks was extended to Dr. Robison.

IVAN E. CARLYLE, M. D., *Secretary.*

KOSCIUSKO COUNTY MEDICAL SOCIETY

RESOLUTIONS ON DEATH OF DR. C. NORMAN HOWARD

Whereas, It has become necessary to record upon our roll the death of Dr. C. Norman Howard;

Whereas, For the past twenty-eight years he has practiced medicine and his speciality in this community, so earnestly and so capably that he has earned a state- and even a nation-wide reputation for professional ability and personal integrity;

Whereas, During that entire time he has been a member of our society, occupying for years its official positions, always alert and active for any measures that would increase the influence of the society and advance the standing of the medical profession;

Whereas, In this association he has endeared himself to each of us by his ever present kindliness of spirit and thoughtfulness of purpose; let it be

Resolved, That we, the members of the Kosciusko County Medical Society of the State of Indiana, individually and collectively, take this means of expressing our appreciation of the long years of association with such an esteemed friend and able colleague;

That, in deepest sorrow and with a real sense of community loss, we hereby extend the sincerest sympathy to the members of his bereaved family;

That a copy of these resolutions be sent to Mrs. Howard and to each of his sons, and a copy be entered in the transactions of the society.

C. C. DUBOIS,
GEORGE W. ANGLIN,
Committee.

Unanimously adopted at special called meeting November 14, 1935.

T. J. CLUTTER, President.
O. H. RICHER, Secretary.

INDIANA STATE DIVISION OF PUBLIC HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report, October, 1935

Diseases	Oct. 1935	Sept. 1935	Aug. 1935	Oct. 1934	Oct. 1933
Tuberculosis	171	130	250	154	168
Chickenpox	226	33	6	134	178
Measles	50	19	27	188	28
Scarlet fever	624	229	99	428	549
Smallpox	6	1	0	4	3
Typhoid fever	26	61	68	43	53
Whooping cough	109	123	139	181	62
Diphtheria	470	177	58	256	335
Influenza	103	93	124	78	163
Pneumonia	74	83	51	14	12
Mumps	76	17	10	1	3
Poliomyelitis	13	10	8	7	4
Meningitis	8	8	10	3	8
Malaria fever	2	5	12	0	0
Undulant fever	1	0	0	0	1
Encephalitis	1	0	3	9	4

BOOK REVIEWS

BOOKS RECEIVED

TUMORS OF THE URINARY BLADDER. By Edwin Beer, M. D., F. A. C. S., visiting surgeon, Mount Sinai Hospital, and consulting surgeon, Bellevue Hospital, New York City. 166 pages, with 52 illustrations, including 8 in color. Cloth. Price $3.50. William Wood and Company, Baltimore, 1935.

* * *

AROUND A WORLD ON FIRE. By Karl E. Kassowitz, M. D. The exploits and escapes of an Austrian World War surgeon. 197 pages, with numerous illustrations. Cloth. Price $2.00. The Gutenberg Publishing Company, Milwaukee, 1935.

* * *

STOMACH AND DUODENUM. By George B. Eusterman, M. D., F. A. C. P., head of Section in Division of Medicine, the Mayo Clinic, and Donald C. Balfour, M. B., M. D., head of Section in Division of Surgery, The Mayo Clinic. 958 pages, with 436 illustrations. Cloth. Price $10.00. W. B. Saunders Company, Philadelphia and London, 1935.

PEDIATRIC TREATMENT. A manual of the treatment of the diseases of infants and children designed as a reference work especially for the general practitioner and physician entering the field of pediatrics. By Philip S. Potter, A. B., M. D., F. A. A. P. 578 pages. Cloth. Price $5.00. The Macmillan Company, New York, 1935.

* * *

SURGERY, QUEEN OF THE ARTS. By William D. Haggard, M. D., F. A. C. S., D. C. L., Nashville, Tennessee, professor of clinical surgery, Vanderbilt University School of Medicine. Foreword by William J. Mayo. 389 pages with 41 illustrations. Cloth, Price $5.50. W. B. Saunders Company, Philadelphia and London, 1935.

* * *

PRESCRIPTION WRITING AND FORMULARY. The Art of Prescribing. By Charles Solomon, M. D., Assistant Clinical Professor of Medicine, Long Island College of Medicine. Foreword by Lewellys F. Barker, M. D. 351 pages with 32 illustrations: Cloth, Price $4.00. The J. B. Lippincott Company, Philadelphia and London, 1935.

* * *

REVIEWS

TUMORS OF THE URINARY BLADDER. By Edwin Beer, M. D., F.A.C.S., visiting surgeon, Mount Sinai Hospital; consulting surgeon, Bellevue Hospital, New York City. 166 pages with 52 illustrations, 8 in color. Cloth. Price $3.50. William Wood and Company, Baltimore, 1935.

The subject of tumors of the bladder becomes a great deal more interesting from every standpoint after reading Beer's text on the subject. The significance of hematuria is brought clearly before the reader in such a way as to impress him with the fact that it is caused by a bladder tumor in enough instances to warrant immediate cystoscopic examination. The text is readable by any physician and he will have learned what the diagnosis is, what the pathology is, and what treatment should be used in instances of bladder tumor. There is everywhere through the book an air of authority on the part of the author. He shows due regard, however, for the opinions of other observers, and the reader is left to choose for himself the methods of treatment.

As stated by the author, the book is for the urologist, the pathologist, and the general practitioner.

* * *

DIAGNOSIS AND TREATMENT OF SKIN DISEASES. Including Care of the Normal Skin. By Jacob H. Swartz, M. D., Instructor in Dermatology, Harvard Medical School, and Margaret G. Reilly, R. N., Supervisor of Skin Diseases, Massachusetts General Hospital. 316 pages. Cloth. Price $3.50. Macmillan Co., New York, 1935.

The authors have presented a very practical treatise on the diagnosis and treatment of the common skin diseases. Particular emphasis is placed on the detailed application of remedies in specific skin diseases. Chapters are devoted to the common skin diseases of the scalp, face, trunk, and extremities. There is also a brief discussion and differential diagnosis of the exanthemata. The outstanding chapter is devoted to the diagnosis and treatment of syphilis. A great deal of practical information is summarized and outlined as to diagnosis, treatment, and reactions to drugs used.

There is also a summary of common prescriptions used in dermatology and a brief discussion of physical agents and laboratory aid. Emphasis throughout the book is placed on nursing care and detail explained in the application of topical remedies. There is a good chapter on the care of normal skin in adults and infants. Many tables of differential diagnosis and a moderate number of illustrations are in the book.

The book will receive a hearty welcome from the physicians who teach dermatology to nurses, as a practical outline of the subject is presented.

* * *

MODERN HOME MEDICAL ADVISER. Your Health and How to Preserve It Edited by Morris Fishbein, M. D.; collaborators: William W. Duke, M. D.; Newell Gilbert, M. D.; J. P. Greenhill, M. D.; Philip S. Hench, M. D.; Raphael Isaacs, M. D.; Philip C. Jeans, M. D.; Wingate M. John-

(Continued on page 702)

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION
INDEX TO VOLUME 28, JANUARY-DECEMBER 1935

ORIGINAL ARTICLES

A

Abscess, Subphrenic (Hancock) 228
Actinomycosis, Malignancy Engrafted on (Ruby) 271
Allergy, Catgut (Case Report) (Tripp) 383
Allergy in its Relations to Otolaryngology (Craft) 133
Allergy, Ophthalmologic Manifestations of (Larkin) 267
Anemia, Erythroblastic (Strong) 57
Angina Pectoris, Gall-Bladder Disease Simulating (Gould) 222
Anesthesia, Cyclopropane, Signs and Phases of (Romberger) 18
Anesthesia, Inhalation (Waters) 650
Anesthesia, Some Recent Advances in (Knoefel) 217
Appendicitis (Skillern) 365
Appendicitis, Consideration of the Treatment of Complicated (Clark-Berman) 329
Apple Therapy, Infant Diarrhea with Special Reference to (Tompkins) 278

B

Bladder Tumor (Cooney) 658
Blood Cell Changes, Qualitative, in the Human, Due to Vitamin A (Crimm-Short) 175
Bowel Obstruction (Gatch) 655
Burns, Treatment of Extensive Cutaneous (Trusler) 112

C

Cancer of the Rectum (Wheeler) 372
Cancer Therapy and the General Practitioner (Stayton) .. 177
Carcinoma, Rectal, Transproctoscopic Resection of (Zehr) 424
Cardiac Diseases, Incidence of in 297 Cases (Moore) 419
Cardiovascular Emergencies (Horine) 642
Cataract, Senile (Gifford) 647
Cataract, Senile, Intracapsular Extraction of (Clark) 319
Catgut Allergy (Case Report) (Tripp) 383
Cesarean Section (Bickel) 482
Cesarean Section (Miller) 639
Charcot's Disease of the Foot (VanBuskirk) 475
Circumcision, Safe Technique for (Cogswell) 371
Classification of Kidney Disease, Study of (Schneck) 274
Clinical Aspects of Frontal Lobe Disease (Karnosh) 568
Closure of Post-Operative Wound with Irradiated Petrolatum (Deutsch, Jr.) 490
Collapse Therapy and Pulmonary Tuberculosis (Moore) ... 171
Conjunctivitis, Morax-Axenfeld (Smith) 317
Cyclopropane Anesthesia, Signs and Phases of (Romberger) 18

D

Diabetic, Operating the (Padgett) 323
Diagnosis and Treatment of Thyroid States (Lahey) 60
Diagnosis of Chronic Non-Tuberculous Lung Infections (Parramore) 118
Diarrhea, Infant, with Special Reference to Apple Therapy (Tompkins) 278
Decentralization in Medicine (Cornell) 29
Doctor's Place in Human Society. President's Address (Leach) 565

E

Emergency Surgical Treatment (Forster) 313
Erythroplastic Anemia (Strong) 57
Essentials of Medical Progress (Fay) 129
Etiology and Treatment of Iritis (Egan) 69
Extraction of Senile Cataract, Intracapsular (Clark) 319

F

Familial Haemolytic Jaundice (Loop) 77
Femur, Management of Fractures of the Neck of (Ruschli-Sichler) 121
Foot, Charcot's Disease of the (VanBuskirk) 479

G

Gall-Bladder Disease Simulating Angina Pectoris (Gould) . 222
Gall-Bladder, Traumatic Rupture of the (Case Report) (Cole) 590
Gastric Polyps (Pennington) 226
General Practitioner, Cancer Therapy and the (Stayton) . 177

H

Hay Fever Seasons in Indiana, Six Fall (Durham) 182
Heart Disease, Roentgenokymographic Study of Aortic (VanBuskirk) 592
Heart Disease, Value of Radioscopy in (Bishop) 213
Heart, the Senile (Kiser) 580
Hernia Through the Epiploic Foramen (Smallwood) 188
Hobbies for Physicians (Paynter) 326
Hypnotic and Sedative, Improved, Due to Synergistic Action of Calcium with Phenobarbital, Preliminary report (Robinson) 662
Hysterectomy, Vaginal (Ottinger) 20

I

Incidence of Cardiac Diseases in 297 Cases (Moore) 419
Indiana, Six Fall Hay Fever Seasons in (Durham) 182
Infant, Management of the, During First Three Months of Life (Abt) 573
Infant, Newborn: Its Hazards and Care (Hudson) 65
Influence of Medicine on Life Expectancy (Murdock) 68
Intraspinal (Subarachnoid) Injection of Absolute Alcohol for Control of Pain in Advanced Malignancy (Case Report) (Gitlin) 80
Iritis, Etiology and Treatment of (Egan) 69

J

Jaundice (Pearson) 489
Jaundice, Familial Haemolytic (Loop) 77

K

Kidney Disease, Study of the Modern Classification of (Schneck) 274

L

Life Expectancy, Influence of Medicine on (Murdock) 68
Lighting (Row) 486
Lobe Disease, Clinical Aspects of Frontal (Karnosh) 568
Lung Infections, Diagnosis of Chronic Non-Tuberculous (Parramore) 118

M

Malignancy Engrafted on Actinomycosis (Ruby) 271
Malignancy, Intraspinal Injection of Absolute Alcohol for Control of Pain in Advanced (Gitlin) 80
Management of the Infant During First Three Months of Life (Abt) 573
Management of Patients Exposed to Rabies (Harvey) ... 284
Mastoiditis, Sources of Error in Radiography of Acute (Smith) 280
Medicine, Value of Oxygen Therapy in (Nickel) 234
Mercurial Poisoning Treated by the Use of Sodium Thiosulphate (Middleton) 662
Morax-Axenfeld Conjunctivitis (Smith) 317
Myths in Medicine (Leonard) 425

N

Nasal Infection, Modern Views About (Fenton) 12
Nervous Patient, the (Turner) 186

O

Obstetrics in General Practice (Asher) 422
Obstruction of the Bowel (Gatch) 655
Operating the Diabetic (Padgett) 323
Ophthalmologic Manifestations of Allergy (Larkin) 267
Otolaryngology, Allergy in Its Relation to (Craft) 133
Oxygen Therapy in Medicine, Value of (Nickel) 234

P

Pain in Advanced Malignancy, Control of through Intraspinal Injection of Absolute Alcohol (Case Report) (Gitlin) 80
Pelvic Varicosities (Wynn) 184
Petrolatum, Irradiated, Closure of Post-Operative Wound With (Deutsch, Jr.) 490
Polyps, Gastric (Pennington) 226
Progress, Essentials of Medical (Fay) 129
Prostate, the (Sparks) 286
Psychotherapy in the General Practice of Medicine (Ebaugh) 124

R

Rabies, Management of Patients Exposed to (Harvey) ... 284
Radiograph of Acute Mastoiditis, Sources of Error in (Smith) 280
Radioscopy in Heart Disease, Value of (Bishop) 213
Rectum, Cancer of the (Wheeler) 372
Renal Infections, Mechanical Factors in (MacKenzie) 1
Resection of Rectal Carcinoma, Transproctoscopic (Zehr) 424
Roentgenokymographic Study of Aortic Heart Disease (VanBuskirk) 592

S

Scarlet Fever Immunization, A Report on (Cavins) 283
Sciatica, General Consideration of (Downey) 429
Silicosis (Banting) 9
Siphon-Drainage Apparatus of the Mariotte Principle, Modified Type of (Banks-Hadley) 381
Society, The Doctor's Place in Human. President's Address. (Leach) 565
Subphrenic Abscess (Hancock) 228
Surgery of the Thyroid Gland (Nafe) 377
Surgical Management of Peptic Ulcer (Weber) 417
Surgical Treatment, Emergency (Forster) 313
Syphilis, Under-treatment versus Over-treatment (Hall, Jr.) 586

T

Thyroid Gland, Surgery of the (Nafe) 377
Thyroid States, Diagnosis and Treatment of (Lahey) 60
Treatment of Extensive Cutaneous Burns (Trusler) 112
Tuberculosis, Collapse Therapy and Pulmonary (Moore) .. 171
Tuberculosis, Laryngeal, Treatment of (Stewart) 230
Tuberculosis, Pulmonary, Recent Advances in Treatment of (Henry) 25

U

Ulcer, Surgical Management of Peptic (Weber) 417

V

Vaginal Hysterectomy (Ottinger) 20
Varicosities, Pelvic (Wynn) 184
Vitamin A, Qualitative Blood Cell Changes in the Human Due to (Crimm-Short) 175

W

Wayne County Medical Society, Detroit, Demonstration (Burns) 138

AUTHORS

A

ABT, ISAAC A., Chicago (Management of the Infant During the First Three Months of Life) 573
ASHER, E. O., New Augusta (Obstetrics in General Practice) 422

B

BANKS, H. M., and HADLEY, M. N., Indianapolis (Modified Type of Siphon-Drainage Apparatus of the Mariotte Principle) 381
BANTING, F. G., Toronto, Canada (Silicosis) 9
BERMAN, J. K., and CLARK, E. D., Indianapolis (Complicated Appendicitis) 329
BICKEL, David, A., South Bend (Cesarean Section) 482
BISHOP, C. A., South Bend (Values of Radioscopy in Heart Disease) 213
BURNS, WILLIAM J., Detroit (Wayne County Medical Society, Detroit, Demonstration) 138

C

CAVINS, A. W., Terre Haute (Report on Scarlet Fever Immunization) 283
CLARK, C. P., Indianapolis (Intracapsular Extraction of Senile Cataract) 319
CLARK, E. D., and BERMAN, J. K., Indianapolis (Complicated Appendicitis) 329
COGSWELL, H. D., Indianapolis (Safe Technique for Circumcision) 371
COLE, A. V., East Chicago (Traumatic Rupture of the Gall-Bladder) 590
COONEY, Charles J., Fort Wayne (Bladder Tumor) 658
CORNELL, Beaumont S., Fort Wayne (Decentralization in Medicine) 29
CRAFT, Kenneth L., Indianapolis (Allergy in Its Relation to Otolaryngology) 133
CRIMM, Paul D., and SHORT, Darwin M., Evansville (Qualitative Blood Cell Changes in the Human Due to Vitamin A) 175
CULBERTSON, C. G., Indianapolis (Management of Patients Exposed to Rabies) 284

D

DEUTSCH, William, Jr., Parker (Closure of Post-Operative Wound with Irradiated Petrolatum) 490
DOWNEY, F. S., Dillsboro (General Consideration of Sciatica) 429
DURHAM, O. C., Chicago (Six Fall Hay Fever Seasons in Indiana) 182

E

EBAUGH, Franklin G., Denver, Colorado (Psychotherapy in the General Practice of Medicine) 124
EGAN, B. W., Logansport (Etiology and Treatment of Iritis) 69

F

FAY, Oliver J., Des Moines, Iowa (Essentials of Medical Progress) 129
FENTON, Ralph A., Portland, Oregon (Modern Views about Nasal Infection) 12
FORSTER, N. K., Hammond (Emergency Surgical Treatment) 313

G

GATCH, W. D., Indianapolis (Recognition and Treatment of Bowel Obstruction) 655
GIFFORD, Sanford R., Chicago (Senile Cataract) 647
GITLIN, Max W., Bluffton (Intraspinal Injection of Absolute Alcohol for Control of Pain in Advanced Malignancy) 80
GOULD, Lyman K., Fort Wayne (Gall-Bladder Disease Simulating Angina Pectoris) 222

H

HADLEY, M. N., and BANKS, H. M., Indianapolis, (Modified Type of Siphon-Drainage Apparatus of the Mariotte Principle) 381
HALL, Arthur F., Jr., Fort Wayne (Under-Treatment versus Over-Treatment of Syphilis) 586
HALL, James K., Richmond, Va. (Substitute Parentage) 479
HANCOCK, J. Duffy, Louisville, Ky. (Subphrenic Abscess) 228
HARVEY, Verne K., and CULBERTSON, C. G., Indianapolis (Management of Patients Exposed to Rabies) ... 284
HENRY, Russell S., Indianapolis (Recent Advances in the Treatment of Pulmonary Tuberculosis) 25
HORINE, Emmet F., Louisville, Ky. (Practical Management of Cardiovascular Emergencies) 642
HUDSON, Foster J., Indianapolis (Newborn Infant: Its Hazards and Care) 65

K

KARNOSH, Louis J., Cleveland, Ohio (Clinical Aspects of Frontal Lobe Disease) 568
KISER, Edgar F., Indianapolis (Senile Heart) 580
KNOEFEL, P. K., Nashville, Tenn. (Some Recent Advances in Anesthesia) 217

L

LAHEY, Frank H., Boston, Mass. (Diagnosis and Treatment of Thyroid States) 60
LARKIN, B. J., Indianapolis (Ophthalmologic Manifestations of Allergy) 267
LEACH, Walter J., New Albany (President's Address) (The Doctor's Place in Human Society) 565
LEONARD, Henry S., Indianapolis (Myths in Medicine) 425
LOOP, Frederick A., Lafayette (Familial Haemolytic Jaundice) 77

M

MacKENZIE, David W., Montreal, Canada (Mechanical Factors in Renal Infections) 1
MIDDLETON, H. N., Indianapolis (Acute Mercurial Poisoning) 662
MILLER, Norman F., Ann Arbor (Cesarean Section) ... 639
MOORE, A. G., Deer Creek (Incidence of Cardiac Disease in 297 Cases) 419
MOORE, Will C., Muncie (Collapse Therapy and Pulmonary Tuberculosis) 171
MURDOCK, Harvey L., Fort Wayne (Influence of Medicine on Life Expectancy) 68
NAFE, Cleon A., Indianapolis (Surgery of the Thyroid Gland) 377
NICKEL, A. C., Bluffton (Value of Oxygen Therapy in Medicine) 234

O

OTTINGER, R. C., Indianapolis (Vaginal Hysterectomy) 20

P

PADGETT, E. E., Indianapolis (Operating the Diabetic) . 323
PARRAMORE, J. O., Crown Point (Chronic Non-Tuberculous Lung Infections—Diagnosis) 118
PAYNTER, C. B., Salem (Hobbies for Physicians) 326
PEARSON, Lyman R., Indianapolis (Jaundice) 489
PENNINGTON, W. E., Indianapolis (Gastric Polyps) ... 226

R

ROBINSON, C. C., East Chicago (Preliminary Report of Improved Hynotic and Sedative) 662
ROMBERGER, Floyd T., Lafayette (Signs and Phases of Cyclopropane Anesthesia) 18
ROW, Hamilton, Indianapolis (Lighting) 486
RUBY, Fred McK., Union City (Malignancy Engrafted on Actinomycosis) 271
RUSCHLI, E. B., and SICHLER, H. G., Lafayette (Management of Fractures of the Neck of the Femur) 121

S

SCHNECK, J. W., Mt. Carmel, Illinois (Study of the Modern Classification of Kidney Disease) 274
SHORT, Darwin M., and CRIMM, Paul D., Evansville (Qualitative Blood Cell Changes in the Human Due to Vitamin A) 175
SICHLER, H. G., and RUSCHLI, E. B., Lafayette (Management of Fractures of the Neck of the Femur) 121
SKILLERN, P. G., South Bend (Appendicitis) 365
SMALLWOOD, R. B., Bedford (Hernia Through Epiploic Foramen) 188
SMITH, Lester A., Indianapolis (Sources of Error in Radiography of Acute Mastoiditis) 280
SMITH, Robert D., Crawfordsville (Morax-Axenfeld Conjunctivitis) 317
SPARKS, A. Jerome, Fort Wayne (The Prostate) 286
STAYTON, Chester A., Indianapolis (Cancer Therapy and the General Practitioner) 177
STEWART, W. E., Terre Haute (Treatment of Laryngeal Tuberculosis) 230
STRONG, Robert A., New Orleans, La. (Erythroblastic Anemia) 57

T

TOMPKINS, Charles A., Indianapolis (Infant Diarrhea with Special Reference to Apple Therapy) 278
TRIPP, H. D., Kewanna (Catgut Allergy: Case Report) . 383
TRUSLER, Harold M., Indianapolis (Treatment of Extensive Cutaneous Burns) 113
TURNER, O. A., Madison (Nervous Patient) 186

V

VAN BUSKIRK, E. M., Fort Wayne (Charcot's Disease of the Foot) 475
VAN BUSKIRK, E. M., Fort Wayne (Roengenokymographic Study of Aortic Heart Disease) 592

W

WATERS, Ralph M., Madison, Wis. (Inhalation Anesthesia) 650
WEBER, Edgar H., South Bend (Surgical Management of Peptic Ulcer) 417
WHEELER, HOMER H., Indianapolis (Cancer of Rectum) 372
WYNN, Justice F., Evansville (Pelvic Varicosities) 184

Z

ZEHR, Noah, Fort Wayne (Transproctoscopic Resection of Rectal Carcinoma) 424

EDITORIALS

A

Advantage of Sterile Milk 385
Again Politics 388
Again, the Drug House 195
A. M. A. Directory 437
Anesthetic Problem, The 83
Animal Experimentation 288
Army and Navy, Medical Corps of the 666
Aschheim-Zondek Test 82
Association in 1935, Our 667
Attention, President Roosevelt! 82

B

Birth Control 385

C

Code, Oculists and the 194
Contraception by "Periodic Abstinence" 334
County Fair 543

D

Dafoe, Indiana's 33
Dangerous Age 192
Death Rate Turning Upward, Is the?..... 142
Debate on Socialized Medicine..... 598
Decisions, Some Supreme Court..... 334
Dog Hair and Dynamite 238
Drug House, Again the 195

E

Etiology of Peptic Ulcer..... 32

F

Foods and Drugs, Pure..... 239
Fly On! 435

G

Gary Session, The..... 595
Grading of Medical Schools..... 387
Gratuitous Medical Service..... 597

H

Health Officer Law, The New..... 192
Home Rule? 386
Hospital Problems, Some..... 598

I

Indiana Medicine Mourns..... 32
Indigent Sick Funds, Federal, Withdrawal of..... 541

J

Juvenile Refractions 289

L

Lay Press and the Physician..... 335
Law, Venereal Disease and the..... 435
Legislation, 1935 and 33

M

Maternal Mortality 288
May Day and Mother's Day..... 237
Medical Corps of the Army and Navy..... 666
Meningitis, Meningococcic 237
Milbank Speaks 141
Milk, Advantage of Sterile..... 385

O

Oaks from Acorns 436
Oculists and the Code..... 194
Opportunity, An 597
Our Recent Graduates..... 665

P

Panel System in Medicine..... 335
"Periodic Abstinence" Contraception by..... 334
Physicians in Politics 436
Politics, Again 388
Politics, Physicians In 436
Postgraduate Work 666
President, Our 541
Public Health Administration..... 143
Puffing Business, This..... 387

R

Refractions, Juvenile 289
Russia, The Fear that Stalks in..... 83

S

Sanitation, Rural 143
Self Drugging 542
Schools, Grading of Medical..... 387
Schools, Watch the 194
Socialized Medicine, Debate on..... 598
Speed Mania 664

T

To the Highest Bidder..... 542
Tourist Camps 289

V

Venereal Disease and the Law..... 435

W

Watch the Schools 194
Welfare Act, Proposed State 290
Withdrawal of Federal Indigent Sick Funds..... 541

SPECIAL ARTICLES

American Medical Association, Atlantic City Session (Hamer) 342
American Medical Association, Special Session of House of Delegates (Crockett)..... 146
Are you Coming to Gary?..... 401
Automobile Accidents and the Doctor (Gallagher)..... 41
Care of the Drowning Patient (Robbins)..... 344
Concerning Dog Hair and Dynamite (White)..... 296
Diphtheria Reports for:
November, 1934 44
December, 1934, and year 1934..... 94
January, 1935 148
February, 1935 204
March, 1935 254
April, 1935 301
May, 1935 349
June, 1935 407
July, 1935 455
August, 1935 554
September, 1935 615
October, 1935 684
Eight Hour Day for Nurses, What About the (Brown)... 348
Federal Income Tax Information (Smith)..... 91
Gary Is Ready For You!..... 444
Indiana Medicine in Retrospect (Zerfas)..... .....42, 92, 152, 201, 252, 299, 346, 403, 447, 548, 609, 673
Indiana State Medical Association—Convention Notes.... 602
Legislative Committee, Report of..... 198
Legislative Matters, Important..... 149
Medico-Legal Department:
Responsibility of Physician in Regard to Charity Patients 45
Law Concerning Power of County Commissioners to disallow Claims 95
Forms A, B, C of FERA Poor Relief Work..... 406
Meeting Today's Challenge (McCracken)....297, 345, 402, 446
Membership Roster 678
Mr. Milbank Speaks (Milbank)..... 89
Postgraduate Programs, Indiana State Medical Association, Indiana University, and Districts.....249-252
President's Page.....40, 90, 151, 200, 247, 298, 445, 547, 604
Public Health Aspects of Social Security Act (Harvey)... 442
Secretaries' Annual Conference..... 39
Secretaries' Column (Mitchell) 45, 95, 148, 204, 254, 301, 349, 407, 455, 555, 608, 685
State Fair Exhibit, 1935—Thyroid Tests..... 546
Suggestions for 1935-1936 from President-Elect..... 605
Township Medical Aid for Indigent (Marshall)..... 394
Under the Capitol Dome..... .....43, 93, 154, 203, 255, 302, 350, 405, 451, 554, 615, 684
Voice of Medicine:
Social Service Racket (Mendenhall)..... 45
Clique Menace (Pollard)..... 97
Anesthetics (Cameron) 97
Social Insurance (Kinneman)..... 155
Hurty Plan and Indiana Plan (Cowing)..... 303
Debates on Socialized Medicine..... 608

DEATHS

A

Abner, John R. 351

B

Baldwin, Clarence A. 618
Batties, Mark D. 618
Barker, Thomas R. 618
Barwick, Samuel O. 408
Bauer, William J. 156
Beck, William R. 351
Benepe, John L. 618
Bickel, Robert J. 47
Bolman, Ralph M. 455
Bonham, David M. 205
Boram, Alta K. 303
Bottorff, John C. 47
Brown, William E. 351
Buchsbaum, Maurice 686

C

Carmack, John W. 46
Carter, Phineas B. 686
Childress, William J. 556
Claypool, J. S. 47
Cluthe, Charles F. 618
Cooke, Benjamin J. 256
Conn, William C. 256
Conner, Norris F. 556
Cox, John L. 556

D

Dreese, Charles L. 256

E

Easley, Elihu P. 455
Edwards, Charles H. 303
Elrod, Stephen B. 97

F

Fitzgerald, Kelley C. 455
Funk, Chester C. 98

G

Gardner, Cyrus A. 556
Glover, E. E. 303
Griswold, Edward H. 256

H

Harris, Walter W. 556
Harrison, Lynn H. 205
Harrold, John R 556
Hetherington, John P. 156
Hetsler, O. I. 98
Hirt, Luther S 455
Hoggatt, W. W. 47
Holdeman, Eugene 618
Hoover, Rufus A. 256
Hosman, Willis E. 206
Howard, C. Norman 686

K

Keckich, Thomas D. 97
Kennedy, A. C. 408
King, Clifford H. 206
Knight, J. C. 98
Kuhn, Leslie A. 205

L

Leach, Walter J. 618
Leathers, Paul 408
Lemon, John H. 408
Lidikay, Edward C. 408
Loar, L. T. 98
Lutz, George W. 556

M

Marshall, David J. 303
McBride, William O. 686
McCord, Charles E. 206
McGee, Joseph A. 303
Mendenhall, Arthur M. 46
Mendenhall, Franklin F. 686
Miller, George D. 408
Miller, John I. 351

N

Newlin, William H. 686
Nixon, John 556

O

Orahood, J. D. 47

P

Payne, Carl F. 98
Phillips, Russell E. 556
Phipps, John M. 256
Powers, Francis J. 618
Preston, Abraham L. 205
Prichard, Walter K. 156
Propper, Isidor J. 618

R

Reed, A. R. 256
Reed, David E. 351
Reynolds, J. M. 98
Rhamy, Lester B. 686
Ritter, Mary T. 455
Rogers, Otto F. 556
Royster, W. L. 47

S

Sellers, Charles A. 303
Schneider, A. L. 686
Schwier, William C. 618
Shields, James M. 47
Shultz, J. J. 351
Sickler, John R. 618
Sigler, Daniel 47
Smadel, Joseph W. 408
Smith, Milton S. 408
Smith, Spencer 618
Smith, Thomas G. 351
Snapp, James A. 618
Solf, Sophie S. 47
Spurgeon, Charles H. 205
Stucky, Thomas E. 303
Stolzer, Charles W. 686
Suhre, Edward F. 455
Sweet, Otis A. 686

T

Teter, J. P. 686
Tully, Lee H. 205

V

Vizard, John W. 205

W

Wagner, Herbert T. 156
Wall, Mahlon M. 455
Wallage, George W. 556
Waller, William H. 47
Weaver, Daniel W. 556
Willan, Carl E 618
Williams, L. O. 98
Wilson, Thomas W. 556
Woodbury, Herbert E. 686
Woolery, Perry 351
Wybourn, David C. 256

BOOKS RECEIVED

Autonomic Diseases or the Rheumatic Syndrome (Rivers). Dorrance and Co.
Anatomy, Human (Morton). Columbia University Press
Anatomy, Elementary Human (Sibley). Barnes and Co.
Around a World on Fire (Kassowitz). Guetenberg Pub. Co.
Bacteriology, Textbook of (Rice). W. B. Saunders Co.
Body Mechanics in Study and Treatment of Disease (Goldthwait-Brown)
Bill, The Doctor's (Cabot). Columbia University Press
Biochemistry, Textbook of (Harrow). W. B. Saunders Co.
Birth Control, Modern Method of (Walton). Walter J. Black
Circulation, Failure of the (Harrison). Williams and Wilkins
Council on Pharmacy and Chemistry of the American Medical Association for 1934, Annual Reprint of (A. M. A.)
Crippled and the Disabled (Kessler). Columbia University Press
Diagnosis, Clinical, by Laboratory Methods (Todd). W. B. Saunders Co.
Diagnosis, Physical (Elmer and Rose). C. V. Mosby Co.
Diagnosis, Physical, Martini's Principles and Practice of (Loeb, Editor) (Farber). J. B. Lippincott Co.
Dictionary, American Illustrated Medical (Dorland). W. B. Saunders Co.
Dictionary, Gould's Medical (Gould, edited by Scott and Brownlow). P. Blakiston's Son and Co.
Diet Control (Anderson). Gallo and Ackerman
Diet, Treatment by (Barborka). J. B. Lippincott Co.
Diet Writing, System of (Collens). Form Publishing Co.
Doctors and Juries (Springstun). P. Blakiston's Son and Co.
Drugs, Useful (American Medical Association)
Economic Problems of Medicine (Christie). Macmillan Co.
Electrotherapy and Light Therapy (Kovacs). Lea and Febiger
Gynecology, Puerperal (Bubis). William Wood and Co.
Harvey Lectures. Williams and Wilkins
Heart Disease, Living Along with (Levin). Macmillan Co.
Heart Visible (Poleviski). F. A. Davis Co.
History, Doctor in (Haggard). Yale University Press
International Clinics—Volume III, 45th Series; Volume IV, 44th Series. J. B. Lippincott Co.
Laboratory Methods and Diagnosis, Clinical (Gradwohl). C. V. Mosby Co.
Laboratory Methods, Manual of Clinical (Dimmit). F. A. Davis Co.
Lilly Research Laboratories Dedication. Eli Lilly Co.
Medical Clinics of North America—Volume 18, Number 3. W. B. Saunders Co.
Medicine and Hygiene, Preventive (Rosenau). D. Appleton-Century Co.
Medicine, General, 1934 Year Book of. Year Book Publishers
Medicine, How to Practice (Kemp). Paul B. Hoeber
Medicine, Hughes' Practice of (Gordon). P. Blakiston's Son and Co.
Medicine, Synopsis of (Tidy). William Wood and Co.
Motherhood, Modern (Heaton). Farrar and Rinehart
Names of Surgical Operations (Black). Bruce Publishing Co.
New and Nonofficial Remedies, 1935 (American Medical Association)
Nervous Patient (Emerson). J. B. Lippincott Co.
Neurology, Textbook of Clinical (Wechsler). W. B. Saunders Co.
Nose and Throat for Practitioners and Students, Diseases of (Imperatori). J. B. Lippincott Co.
Observations of a General Practitioner (Macartney). Gorham Press
Pathology, Human (Karsner). J. B. Lippincott Co.
Pathology of the Peritoneum, Surgical (Hertzler). J. B. Lippincott Co.
Pediatric Treatment (Potter). Macmillan Co.
Physiology in Modern Medicine (Macleod). C. V. Mosby Co.
Prescription Writing and Formulary (Solomon). J. B. Lippincott Co.
Psychiatry, Objective and Experimental (Cameron). Macmillan Co.
Report on Seventh International Congress of Military Medicine and Pharmacy (Bainbridge). Collegiate Press
Sculpture in the Living (Maliniak). Lancet Press
Stammering and Allied Disorders (Bluemel). Macmillan Co.
Skin, Diseases of the (Sutton and Sutton). C. V. Mosby Co.
Stomach and Duodenum (Eusterman). W. B. Saunders Co.
Surgeon General of the Public Health Service of the United States, Annual Report for the Fiscal Year 1934
Surgery, Textbook of (Babcock). W. B. Saunders Co.
Surgery in General Practice, Minor (Gibb). Paul B. Hoeber
Surgery, Queen of the Arts (Haggard). W. B. Saunders Co.
Surgical Clinics of North America. W. B. Saunders Co.
Syphilis, Clinical Management of (Harnes). Macmillan Co.
Thyroid Gland, Diseases of the (Hertzler). C. V. Mosby Co.
Treatment, Methods of (Clendening). C. V. Mosby Co.
Tuberculosis, One Thousand Questions and Answers on (Heise). Journal of Outdoor Life
Tumors of Urinary Bladder (Beer). Wm. Wood
Urology, Principles and Practice of (Hinman). W. B. Saunders Co.
Woman, Periodic Fertility and Sterility in (Knaus-Kitchin). Concip Co.
Woman Asks the Doctor (Novak)

BOOK REVIEWS

Anatomy, Applied (Davis) 416
Anatomy, Human (Morton) 160
Bill, The Doctor's (Cabot) 621
Birth Control, Modern Method of (Welton) .....June xx
Body Mechanics in Study and Treatment of Disease (Goldthwait-Brown) 564
Council on Pharmacy and Chemistry of A. M. A., Annual Reprints of (A. M. A.) .....Sept. xix
Circulation, Failure of (Harrison) 361
Diagnosis, Martini's Principles and Practice of Physical (Loeb-Farber) .....June xx
Diagnosis, Physical (Elmer-Rose) 416
Diet, Treatment by (Barborka) 265
Drugs, Useful (A. M. A.) 362
Economic Problems of Medicine (Christie) 362
Genito-Urinary Diseases, Synopsis of (Dodson) 564
Gynecology (Anspach) .....June xx
Gynecology, Puerperal (Bubis) .....Sept. xx
Heart Visible (Poleviski) 209
History, Doctor in (Haggard) 266
Medical Clinics of North America (Saunders Co.) ...June xix
Medicine, Manual of Practice of (Stevens) 416
Medicine, Synopsis of (Tidy) .....June xx
Modern Home Medical Adviser (Fishbein) 693
Motherhood, Modern (Heaton) 362
Nature's Way (Pedersen) 209
Nervous Patient (Emerson) 266
New and Nonofficial Remedies (A. M. A.) 474
Obstetrics, Practical, for Students and Practitioners (Bland-Montgomery) 208
Physiology in Health and Disease (Wiggers) 209
Physiology in Modern Medicine (Macleod) 362
Sculpture in the Living (Maliniak) .....May xix
Skin, Diseases of (Sutton-Sutton) 564
Skin Diseases, Diagnosis and Treatment of (Swartz) 693
Stammering and Allied Disorders (Bluemel) .....May xix
Surgery, Minor, in General Practice (Gibb) .....May xix
Surgery, Textbook of (Babcock) 266
Surgical Clinics of North America, Vol. 15, No. 3 (Saunders Co.) 564

Syphilis, Clinical Management of (Harnes) 416
Treatment, Modern Methods of (Clendening) .....Aug. xix
Tumors of Urinary Bladder (Beer) 693
Urology, Principles and Practice of (Hinman) 416
Woman Asks the Doctor (Novak) 621

SOCIETIES AND INSTITUTIONS

American Association of the History of Medicine..... 360
Carroll County Medical Society..... 560
Clinton County Medical Society..... 692
District Societies:
Third 264, 357
Fourth 357
Sixth 357
Seventh 692
Eighth 358
Eleventh 358, 692
Thirteenth 692
Economics, Report on Special Conference on (Chicago).. 413
Indiana Academy of Ophthalmology and Otolaryngology.. 265
Indiana Division of Public Health.....
.....167, April xix, 264, 311, 412, 461, 560, Nov. xx, 693
Indiana Roentgen Society, Resolutions Passed at Annual Meeting .....April xxi
Indiana State Medical Association:
The Council 101, 623
The House of Delegates..... 624
General Meetings 633
Section on Medicine..... 635
Section on Surgery..... 636
Section on Ophthalmology and Otolaryngology..... 636
Section on Anesthesia..... 636
Executive Committee.....50, 106, 261, 309, 358, 561, 637
Bureau of Publicity.....
.....51, 108, 166, 263, 311, 359, 412, 460, 561, 637, 691
Constitution and By-Laws..... 462
Indianapolis Maternal Health Clinic, First Annual Report of .....April xix
Kosciusko County Medical Society.....561, 692
Medical College of Indiana, Class of 1903, Reunion..... 412
Medical Education, Hospitals, and Licensure, 31st Annual Congress 211
Secretaries' Conference 161
Works Progress Administration, Regulations Concerning Injured Employees 461

ABSTRACTS

OBSERVATIONS ON TREATMENT OF ACNE VULGARIS

According to JEFFREY C. MICHAEL, Houston, Texas (*Journal A. M. A.*, Aug. 3, 1935), acne vulgaris is a syndrome the cause of which is a complex of various interacting factors. In juvenile patients the physiologic activity of the gonads appears to be the most important factor. In older patients minor functional and organic disorders apparently but not indisputably play a definite role in the causation. The recent tendency to depend less on roentgen therapy and more on general and local measures should be encouraged. While the roentgen ray is the most certain means of eradication of the lesions, recurrences are too frequent to make this treatment entirely satisfactory. In juvenile patients recurrences are especially frequent and for this reason it is believed that the roentgen ray should not be used except under unusual circumstances. For older patients, especially those between 18 and 25, roentgen therapy is the method of choice. It should be supported by an industrious search for and attention to any probable etiologic factors.

ANALYSIS OF APPARENT INCREASE IN HEART DISEASES

ALFRED E. COHN, New York (*Journal A. M. A.*, Nov. 2, 1935), demonstrates, by a set of curves, the net increase in circulatory diseases after the age of 60. The figures given describe the condition in the U. S. registration area of 1900. They may be representative of the country as a whole, but, seeing how closely diseases of all sorts are dependent on the environment, the climate in the West and South may actually require a different description of the course of cardiac disease for these states. Beginning with the age of 40 there has been a rise in the death rate from chronic cardiac diseases, decade by decade, from 1900 to 1930. From his study the author infers that there has been a rise, but only a slight one, in the death rate from circulatory diseases. The rise is due apparently to savings from deaths resulting from infectious diseases in the very decades in which the slight rise in the circulatory disease has occurred.

REHABILITATION AND PLACEMENT IN INDUSTRY OF THOSE HANDICAPPED WITH CARDIOVASCULAR DISEASE

The study of WILLIAM D. STROUD, Philadelphia (*Journal A. M. A.*, Nov. 2, 1935), is not primarily concerned with the individual's disability, but with the jobs that can be performed by the general class of those so handicapped. In the pursuance of this, 40,000 workers have been more or less directly observed in the performance of 1,000 different operations in twenty-five industries. Since these operations at present employ as many more workers not observed and the total grows to 115,000 in normal times—about half of the 200,000 odd normally employed in manual work in Philadelphia industries, when common labor and the higher brackets have been excluded—the coverage is considered sufficient to represent the whole. The data gathered during the study of these operations from the standpoint of performance of the specifically handicapped has been tabulated on the basis of possibilities per thousand workers in each industry. The large variations among the industries reflect primarily the differences in the character of the work. In some cases, notably hat and cap manufacturing, the influence of a strict medical examination of employees is paramount. It must also be admitted that the individual making the study has had an influence in some cases, though these men have all been engineers with industrial experience. A number of other industries have been covered without tabulations having been made. The general showing bears out the figures of the tables, indicating that 25 per cent of all jobs in industry are possible of performance by this class of handicapped person without compromising either the job or the job holder. Vital statistics suggest that individuals with cardiovascular disease comprise as large a group, if not the largest group, of persons with physical handicaps. With proper functional classification by private physicians or physicians in heart clinics, with especially trained placement workers in city and state rehabilitation bureaus, cardiac patients in much larger numbers than previously recognized may earn a living through training in sheltered work shops with ultimate placement in industry, or, if previously trained, through direct placement in industry. If common labor is divided into two classes, namely, light labor and heavy labor, almost 100 per cent of cardiac patients, except those in class 3, are employable at light labor. To accomplish such rehabilitation and placements it is necessary to obtain the interest of the medical profession and to impress physicians with their responsibility toward the handicapped, and the necessity of cooperating with the social service workers, especially trained placement workers and city, state and county rehabilitation bureaus. Employers should be carefully approached and educated. The sympathetic handling of the individual handicapped by cardiovascular disease is most important.

BOOK REVIEWS—Continued

(Continued from page 693)

son, M. D.; Elliott P. Joslin, M. D.; Oliver P. Kimball, M. D.; Philip Lewin, M. D.; Carey P. McCord, M. D.; R. T. McKenzie, M. D.; M. M. Portis, M. D.; Sidney A. Portis, M. D.; George K. Pratt, M. D.; Thurman B. Rice, M. D.; Arthur Stillians, M. D.; Solomon Strouse, M. D.; Walter Timme, M. D.; Frederick F. Tisdall, M. D.; Dwight L. Wilbur, M. D.; Russell M. Wilder, M. D.; and Francis Carter Wood, M. D. 905 pages. Illustrated. Cloth. Price $9.50. Doubleday, Doran and Co., Inc., Garden City, N. Y.

From time immemorial "doctor books" have had a more or less important place in the average home library. Too many of these volumes have been poorly written or have had too much nonsensical advice in their pages. It is refreshing, therefore, to find a book written for lay consumption, carefully edited, and written in a language at once understandable and authoritative. Such is the book, "Modern Home Medical Adviser," edited by Dr. Morris Fishbein. The twenty-three collaborators, all prominent in their respective specialties, have helped to make this volume of interest to all, since the subject covers practically all the major ills of humanity.

The opening chapters, written by the editor, will command the interest of the profession, for it is here that he makes plain that the choice of a family physician should not be one of the hit or miss variety. Graduation from a recognized medical school, licensure by the state, plus membership in the county medical society—these are the things that should be looked into. His discussion of the characteristics of an ethical physician is especially well done.

The family medicine chest comes in for a very well done bit of advice, as does feminine hygiene, the latter chapter not overlooking a discussion of contraception, with an understandable statement of the much-discussed "rhythm." Our own Dr. Thurman B. Rice has prepared the chapter on sex hygiene, and he does it extremely well. Parents will find here the answer to "What should the adolescent child know?" Dr. Rice has the happy faculty of taking what are often regarded as prosaic incidents and making of them an interesting story, each with what might be termed a moral worth remembering.

Prenatal and postnatal care is carefully considered, and proper attention is given to the many details that should be observed during this period. The care and feeding of the child comes in for a very informative discussion. Infant hygiene, the infectious diseases of childhood, the transmissible diseases and the affections of the respiratory tracts are well discussed. Newell C. Gilbert contributes a chapter on the diseases of the heart and circulation in a very clever manner, portraying the various affections of the heart in a manner that should interest even the casual reader.

The kidney and its affections and the blood are generously discussed, as are the deficiency diseases, a most intriguing chapter by Russell Wilder and Dwight Wilbur.

The allergies are not overlooked, William Duke using some twenty pages of the book to a very good advantage in talking about this subject. Joslin, of course, does the chapter on diabetes, and it is done in his best manner. Blood pressure seems to be given just enough space, enough to tell the reader what a layman should know about it, and no more.

Cancer is intelligently portrayed, due attention being given to the importance of early recognitions of this scourge. The skin, the eye, ear, nose and throat, the teeth, and the venereal diseases are properly mentioned.

It is to be expected in a modern medical book for laymen that the matter of diet would receive much attention. Dr. Solomon Strouse prepared this section. Tait McKenzie presents his ideas on posture, a subject which is attracting no little attention these days. The foot is not neglected, for one chapter discusses proper shoes, flat feet, high and low arches, corns, and bunions, and all that sort of thing. An exception is made in that chapter in that the treatment for soft corns is given; it is one of the few instances to be found in the volume where a definite treatment is advised.

Nervous and mental diseases form the subject for one chapter, and the closing chapter on old age, prepared by Dr. Fishbein, concludes the volume.

It is a book that most families should have in their homes; a book that the medical man will do well to read; a book that might well be handed by the physician to many of his patients, if they are of the sort who return books.

INDIANA MEDICINE IN RETROSPECT—Continued

(Continued from page 677)

lications all along very much against our inclination; but having unexpectedly become involved in the difficulty, we were compelled to continue to publish, or subject ourselves, to the imputation of partiality by one side or the other. We trust that, under these circumstances, the public will excuse us for what we have done; and we know that the gentlemen immediately concerned have no right to complain of our determination to publish no more."

(Reference continued from bottom of page 675)

"The schoolmaster of Tarbolton had established a shop for groceries, and having a liking for the study of medicine, he took upon himself the airs of a physician, and advertised that 'advice would be given in common disorders, at the shop, gratis'. On one occasion, at the Tarbolton Mason-lodge, when Burns was present, the schoolmaster made a somewhat ostentatious display of his medical acquirements. To a man so easily moved as Burns, this hint was sufficient. 'On his way home the Poet found a neighbor lying tipsy by the roadside; the idea of Death flashed on his fancy, and seating himself on the parapet of a bridge, he composed the poem; according to Allan Cunningham. The laughter occasioned by the publication of the satire drove, it is said, John Wilson, schoolmaster and apothecary, out of the county." The following stanzas are taken from the poem:

Death is speaking:

" 'And then, a' doctor's saws and whittles,
Of a' dimensions, shapes, an' mettles,
A' kinds o' boxes, mugs, an' bottles,
He's sure to hae;
Their Latin Names as fast he rattles
As A B C.
. . . . . .

" 'Forbye some new, uncommon weapons,
Urinus Spiritus of capons;
Or Mite-horn shavings, filings, scrapings,
Distill'd per se;
Sal-alkali o' Midge-tail clippings,
And mony mae.
. . . . . .

" 'A countra Laird had ta'en the batts,
Or some curmurring in his guts,
His only son for Hornbook sets,
An' pays him well.
The lad, for twa guid gimmer-pets,
Was Laird himsel.
. . . . . .

" 'A bonie lass, ye kend her name
Some ill-brewn drink had hov'd her wame;
She trusts hersel, to hide the shame,
In Hornbook's care;
Horn sent her aff to her lang hame,
To hide it there.
. . . . . .

" 'That's just a swatch o' Hornbook's way;
Thus goes he on from day to day,
Thus does he poison, kill, an' slay,
An's weel pay'd for't;
Yet stops me o' my lawfu' prey,
Wi' his damn'd dirt. . . .' "

Alexander Smith, editor, The Complete Works of Robert Burns. Thomas Y. Crowell & Co., N.Y., 1884, pp. xii, 22-23, 584.

ABSTRACTS

APPENDICITIS

C. D. Brooks, *The Journal of the Michigan State Medical Society*, July, 1935, has much that is worthwhile to say concerning the mortality from appendicitis. He declares when more than twenty thousand persons die from this disease each year it is higb time that this subject be well discussed. Appendicitis cases, especially the acute cases, are usually seen first by the family physician, and his is the greatest responsibility. While it is advisable that these cases be in the hands of experienced surgeons, yet an early diagnosis and an operation hy the lesser experienced usually terminates favorably. Cathartics are commonly responsible for many deaths in these cases, but those taken by the patient are usually not so dangerous as those ordered by the physician, because the patient uses self-medication with the beginning of abdominal pain. Physicians should advise their patients never to use a cathartic in cases of abdominal pain without first consulting their physician.

The use of the ice bag should he taboo, because it serves but to mask tbe symptoms; it has no value as a remedial agent. While tbe blood count is important in many cases, too much reliance is placed upon such laboratory tests. Valuable time ls often lost while awaiting this procedure. Waiting for muscle spasm over McBurney's point is a harmful delay.

There are four common positions in which the appendix is found, and the physician should be familiar with them: (1) higb rectus position, occupying the right kidney fossa; (2) low right position, where the appendix is walled off, and pain and spasm are near the crest of the ileum; (3) the so-called pelvic appendicitis where the appendix is under the bladder, low in the right lower quadrant, three or four inches below tbe normal position; (4) tbe appendix which occupies the left lateral position where the cecum may he rotated toward the left; the tenderness in such a position will he over to the left side of the abdomen. In all of these unusual positions, the symptoms will vary.

While the temperature may be normal early in some of the severe cases, within 24 hours it is found to be from 99 to 101 degrees. Nausea and vomiting are found in 60 to 70 per cent of acute cases, especially in children, though many cases have only the symptom of abdominal pain.

When a diagnosis of appendicitis is made, immediate removal of the offending organ is always advisable. However, tbe writer advises expectant treatment in those cases that are commonly seen in cold weather, where the illness begins with a sore throat or a general malaise, with the temperature over 100 degrees. Such patients, even thougb there is some abdominal distress, should be carefully watched and, of course, no cathartics given. The most important symptom in unruptured cases is that of pain, localized over the appendix, no matter wbat its position. A common sign of a ruptured appendix is that of repeated nausea and vomiting, with chills or chilly sensations. The retraction of the right leg is a symptom not to he overlooked. If an operation can be performed within 24 to 36 hours from onset of symptoms, in a good hospital and by a fairly well-trained surgeon, the mortality is practically nil. Mortality rate is highest in operations for acute appendicitis with complications, when operations are performed on the third or fourth day, or later.

The management of these cases, complicated witb peritonitis, becomes a different matter. It is usually advisable to withhold operations on patients with marked distention, who have vomiting, temperatures over 101, and who have been sick several days; they should have medical treatment, the operation to come later. Withhold everything by mouth; intravenous or subcutaneous saline solution is freely used. Tbe patient sbould be hospitalized.

Drainage of stomach and duodenum hy a Levine tube, inserted through the nose, has done more than anything else for desperately ill patients. Through this tube may also be given small doses of hypotonic salt solution or glucose, tbis for stimulation of the patient. Hot massive packs are placed over the abdomen. A rectal tube may be inserted and left *in situ*, and through this tube may be given salt solution in dosage of not more than three ounces. Operation in these cases is not advised earlier than four to eight weeks. Spinal anesthesia, excepting in very young and very old people, is the anesthetic of choice in appendicitis cases, while gas and ether is recommended for children, and local anesthesia for the aged.

Once in the abdomen, packs are sparingly and carefully used; in cases of local abscess or diffuse appendicitis where the appendix is perforated, the author advises against the use of rubber tube drainage. "However, if the appendix is ruptured less than 24 hours, no drainage is used in some patients." With a ruptured appendix and with fecal concretions in the abscess cavity, soft ruhber tube drainage is quite satisfactory. Stab drains, multiple incisions, and gauze drains are never used. "Sometimes we leave the incision entirely open, using no sutures wbatever." Morphine, one-sixth grain, is a valuable adjunct in after treatment; pitressin is given on the operating table and repeated every three or four hours for twelve doses or more.

THE MORTALITY FROM CANCER

It has been frequently stated that cancer is on the increase all over the civilized world. An uncorrected statistical tabulation s eems to conform this statement and yet it has been frequently pointed out that the increase may he apparent rather than real. It has been accounted for hy some as due to better diagnosis or again due to the fact that the average span of life nowadays is considerably greater than it used to he. More persons live beyond 50 and into the cancer age. Many now die of cancer who formerly would have died in infancy or later from some infectious or nutritional disease.

Despite these explanations the statistics as to the increase in the incidence of cancer have long heen disquieting and any statistics showing a contrary trend have been lacking. Therefore, a tabulated study which throws some light on this question should be welcome. The Metropolitian Life Insurance Company has recently issued a monograph entitled *The Mortality from Cancer*, in which it sets forth in statistical form (tables, graphs, and so forth), the experience among industrial policyholders during the years from 1911 to 1930. In this mass of material there is one thing which stands out and which appears to be of great significance: while the general mortality from cancer has increased the increase has been confined almost entirely to cancer of concealed organs. Cancer of the cervix of the uterus among white women shows a marked decline and the same thing is true of cancer of the skin. Both the skin and cervix are readily accessible to the unaided eye and it appears probable that cancer in these regions is recognized earlier and much more often cured than was formerly tbe case. Improvement in diagnostic technique, while it has led to a higher incidence of recognized cancer, has led also to a lower mortality from cancer of the skin and cervix. Of course, the same thing cannot be true of cancer of the stomach, for example. Here our improved technique has increased the number of recognized cancers but has not as yet materially lowered the mortality. Both the diagnosis and treatment of internal cancers will have to improve considerably before statistics can hope to show a decline in the mortality rate. But the fact that accessible cancers are less often the cause of death should he a source of encouragement to all surgeons and physicians who have been struggling witb this disease.

Another factor in cancer of the cervix is pointed out: "The close association between cancer of the uterus, particularly of the cervix, and injuries to that organ during childbirth has heen generally recognized. With the falling birth rates which have obtained in the United States and Canada it is only natural that the death rates from cancer of tbe uterus should have declined."

This is certainly an interesting comment. It suggests the possihility that an advancing civilization with improved hygiene, and better living conditions, will ultimately bring about a fall in the death rate from cancer in general.—*Young.*—Reprinted from *The Urologic and Cutaneous Review*, August, 1935, p. 597.

CRITICAL ANALYSIS OF HEART DISEASE MORTALITY

O. F. HEDLEY, (*Journal A. M. A.*, Nov. 2, 1935), is of the opinion that the present method of reporting and tabulating heart disease mortality statistics does not reflect a true picture of heart disease mortality. Only 80 per cent of deaths occurring in hospitals in a large city and tabulated for the purpose of vital statistics as due to heart disease were found on examination of the hospital records to be due to that cause, while only 62 per cent of deaths due to heart disease were so officially recorded. It is not possible to obtain an accurate conception of the total number of deaths from heart disease or of any of the various etiologic types. Within certain limits, the more accurately heart disease is diagnosed the less reliable are the official mortality statistics. This is due to the difficulties in interpreting diagnoses made along etiologic lines in terms of the International List of Causes of Death. It is quite likely that with further advances in clinical medicine these points of view will become more divergent and vital statistics even more unreliable. It is proposed that heart disease when reported along etiologic lines shall be tabulated as subtitles under the respective etiologic categories. Consideration should be given toward eventually revising the International List of Causes of Death so that heart disease mortality may be officially recorded on an etiologic basis. Physicians are urged to use etiologic diagnoses in reporting heart disease mortality. Registrars of vital statistics should be most loath in questioning death certificates containing approved clinical terms. It should be recognized by practicing physicians, coroners and statistical officials that the employment of superficially accurate diagnosis based on insufficient evidence results only in the vitiation of mortality statistics in general. Many diagnoses of heart disease are made without sufficient evidence. While the use of an etiologic terminology is not suggested as a panacea for intentional misstatements it is believed that fewer mistakes are made when heart disease is diagnosed in terms of its causative factors.

ACTION OF MERCUROCHROME AND OTHER DRUGS ON NORMAL HUMAN SKIN AND IN INFECTED WOUNDS

JUSTINA H. HILL, Baltimore (*Journal A. M. A.*, July 13, 1935), confines her paper to the presentation of additional material in regard to the bactericidal and bacteriostatic action of mercurochrome and other drugs on skin and in wounds. This involves certain carefully limited comparisons and the use of new methods. The subject matter is limited to new material for which she is personally responsible. She finds that there is urgent need for standard methods of studying the *in vivo* action of antiseptics for special uses. Methods are suggested which, on further refinement, might serve as bases for such standards. In regard to the action of antiseptics applied to the skin, it is shown that: 1. Under conditions of practical use no antiseptic studied can invariably sterilize heavily infected skin. 2. Aqueous solutions of antiseptics are not as a rule suitable for preoperative skin sterilization. 3. Both the 2 per cent tincture and 2 per cent aqueous mercurochrome solutions are bactericidal and bacteriostatic on human skin. The 2 per cent tincture of mercurochrome is superior to the aqueous solution on the skin. Only the tincture has been advocated for preoperative skin sterilization. If comparisons are to be made between the bacteriostatic actions of preparations of iodine and mercurochrome on the skin, the order of efficacy, according to the results of the experiments, is as follows: the 2 per cent tincture of mercurochrome; the 7 per cent tincture of iodine, not removed with alcohol; the 2 per cent aqueous solution of mercurochrome, and then the 7 per cent tincture of iodine, removed with alcohol. It is shown that it is improbable that a single application of any known antiseptic will sterilize a heavily infected wound. There is evidence that while both the tincture and aqueous solutions of mercurochrome are bacteriostatic in heavily infected wounds, the aqueous solution, under the conditions of the tests, is superior to the tincture of mercurochrome and to the other antiseptics tested, in that it keeps the bacterial count lower and does not interfere with phagocytosis.

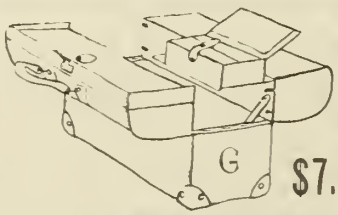
PROFESSIONAL PROTECTION

SINCE 1899 SPECIALIZED SERVICE

A DOCTOR SAYS—

"I believe that this is the best Christmas present I have received in my 22 years of practice. I appreciate your Company's handling this matter so promptly and will recommend you to all my friends."

THE MEDICAL PROTECTIVE COMPANY
OF FORT WAYNE, INDIANA
WHEATON, ILLINOIS



Physicians' BAGS
$7.98 to $20
GAUSEPOHL TRUNKS
151 MONUMENT CIRCLE
Indianapolis

Important to Your Babies!

ACCEPTED by AMERICAN MEDICAL ASSN.



Larsen "Freshlike" Strained Vegetables are first quality garden fresh vegetables cooked, strained and sealed under vacuum to protect vitamins and mineral salts. For further protection we seal in special enamel lined cans.

All Varieties 10c Per Can

LARSEN'S *"Freshlike"* Strained Vegetables

THE LARSEN COMPANY, Green Bay, Wis.

THE RELATIONSHIP OF THE MILBANK MEMORIAL FUND TO THE FIELD OF HEALTH AND THE MEDICAL PROFESSION

Address by ALBERT G. MILBANK

President of the Milbank Memorial Fund, New York,
at the Annual Conference of Secretaries of the
County Medical Societies of Indiana, Indianapolis
January 27, 1935

When Dr. Mitchell invited me to speak here tonight I had some misgivings, realizing that, in some quarters, efforts have been made to put on the "spot" Foundations in general, and our Fund in particular, and that I would be facing a group of doctors, some of whom at least would be harboring the impression that the president of the Milbank Fund must be an officious sort of hybrid in whom ignorance and prejudice are unhappily blended. But the sincerity and cordiality of your introduction, Mr. Chairman, relieves my mind and touches me deeply.

Normally, my preference is to work and not to speak. On the relatively infrequent occasions when I have been persuaded to emerge from my customary obscurity I always feel that I am violating one of the sound precepts given me by my wise father, who used to say that it is better for a man to take a back seat and be discovered than to take a front seat and be found out.

However, when misunderstandings arise and assume regrettable proportions between groups whose interests and purposes call for mutual understanding and cooperation, one's personal preferences should yield to the exigencies of the situation even at the price of compelling you to listen with such patience as you may possess to a layman.

Not long ago, in New York, when the Bellevue-Yorkville Health Center was turned over to the Department of Health, I made a passing reference to the subject of which I would speak more this evening. In an endeavor to summarize nature of the complaints against our Fund, which had been voiced privately and publicly, I said that the Fund has been charged with advocating State Medicine; of seeking to demote the members of the medical profession to the level of government clerks; of placing the emphasis on the quantity of medical care rather than on the quality of medical care; of destroying that priceless human as well as traditional professional relationship between doctor and patient which has been one of the glories of the medical profession from time out of mind; of regimenting and sovietizing a group whose training costs more in time and money than the training of almost any other group in the country, and of blaming the doctors because many people do not receive adequate medical care. And all this, it is claimed, is being attempted by a lay organization which is asserted to have little knowledge of medical problems and scant interest in acquiring that knowledge from the only source from which it can be obtained—namely, from the medical profession.

I then added that if all, or any appreciable part, of these charges had any foundation in fact, speaking for myself and for the Directors and Staff of the Fund, I would be the first to concede that the medical profession has a just grievance, and I concluded with a denial that the charges have, in fact, any substantial foundation.

This evening I would like to develop affirmatively the position of the Fund in the field of health and the relations it would like to see established between it and all the other groups operating in that field in which, of course, the members of the medical profession are obviously preeminent.

It would be well at the outset to say that our Fund, through its Board of Directors, decided in 1921, for reasons which I will mention later, to make the public aspect of Health its major field of interest. At that time Edward W. Sheldon was President of the Fund and Elihu Root was one of the interested and active directors. In furtherance of that general policy it set up two auxiliary committees to examine into this general subject, to make recommendations as to procedures calculated to promote the health of the public and to review from time to time the adequacy and effectiveness of such procedures. The first of these auxiliary committees was a small group called the Technical Board, of which the first chairman was the late Dr. Herman A. Biggs, and which has met frequently and regularly since its organization. The second of these auxiliary committees was a larger group, called the Advisory Council, of which the late Dr. William H. Welch was the first chairman—a position he filled with great distinction until shortly before his death. The Advisory Council is kept in touch with the activities of the Fund by bulletins released from time to time and meets once a year in a two-day session, during which it subjects the program of the Fund to critical

analysis and makes suggestions as to future programs.

Both of these committees are made up of representatives from all of the groups actively engaged in the broad field of Health—public health, the private practice of medicine, hospitals (public and private), nursing, social and welfare organizations. Whenever a question arises which involves a matter of policy or the expenditure of money the Board of Directors is free to seek the counsel and advice of the Technical Board, but the final decision remains with the Directors of the Fund.

For example, the Directors authorized the series of Health Demonstrations with which you are doubtless familiar and which were designed to ascertain what results could be expected from a coordinated health program in which physicians, public health officers and voluntary health agencies participated; what such a program would cost and to what extent the community would, after a time, assume such costs. These Health Demonstrations were authorized by the Directors and, judged by the overwhelming evidence in the files of the Fund received from many sources, the Directors have no question as to their medical and social value.

As to methods of meeting the costs of medical care, however, a different situation exists. Here the Directors have taken no action nor, for that matter, has any recommendation on this subject been made to the Directors by the Technical Board. In this matter the Staff of the Fund, with the knowledge and informal approval of the Directors, has conducted a series of studies as to methods in operation in this country and in procedures in operation in many other countries set up to deal with this problem. No final report of these studies has been made. In fact, the studies themselves have not been completed. Interim reports embodying tentative proposals have been released by the Staff for the purpose of encouraging discussion and criticism. Therefore, the Directors of the Fund are free to take any one of three courses in relation to this subject: (1) they may concur in whole or in part with such conclusions; (2) they may favor some other solution of the problem; or (3) they may abstain from taking any position whatever and simply make the studies of the Staff available to those interested in the subject.

THE FUND AND THE FIELD OF HEALTH

In order to get a proper perspective of this position the Fund seeks to occupy in the field of Health it will not be amiss to take a look at its origin. Spiritually and financially it is the embodiment of a wise, generous, and charming woman who, fifty years ago, began a series of noteworthy gifts which continued uninterruptedly until her death in 1921 and whose carefully considered philanthropic philosophy the Fund, which she established in 1905, adopted as the basis of its own policies.

Elizabeth Milbank Anderson was one of those rare souls who combined a brilliant mind, a love of humanity, a generous nature, and a keen sense of humor. She was an unquestioned individualist, but with a profound sense of her social obligations. She mistrusted fads and visionary theories as solutions for current problems, but the honesty of her mind made it impossible for her to ignore a problem even when its solution called for changes in an established procedure. She was a conservative by inheritance and environment, but one who understood that the world does not stand still and that when conditions change the cause of conservatism is best served, not by an unreasoning resistance to any change whatsoever, but rather by a willingness to make reasonable changes, in form and procedure, while preserving the sound principles which, like the eternal verities, persist because they are, in fact, based on truth.

With such a tradition and such an inspiration it would be quite out of character if our Fund should seek to undermine those foundations of the practice of medicine which have been built up, tested and found good over the years, or to discredit the front-line troops upon which everyone must rely to win the common fight for better health for the people of the United States.

As often happens in human affairs a shattering personal loss had a profound effect upon Mrs. Anderson's attitude toward philanthropy. Her only son died of diphtheria when he was still a little boy. As her brave spirit rose to meet the most crushing blow that Fate could have dealt her, she began to give reasoned direction to her generous impulses which up to that time had been the result of emotional rather than of rational processes.

From that time on, imperceptibly at first and more obviously as the years went by, she looked upon avoidable sickness and premature death as twin tragedies ever menacing human happiness. Health for all of the people became her paramount interest and preventive medicine began to assume in her mind equal importance with curative medicine.

Poverty always stirred her sympathies, but here again a careful analysis of the causes of poverty placed sickness at the head of the list. So from whatever angle she approached the problem of how to make the best use of her money she found but one answer—an attack upon sickness as Public Enemy Number One.

This conviction was the genesis of the Fund and this is the trust which the Directors of the Fund assumed and have endeavored to fulfill. A little later it will be well for us to take a "look at the record," as Al Smith says, and see to what extent and in what manner the Directors of the Fund have kept faith with its founder. But, before doing so, it will not be amiss to take a broad and sweeping view of the general conditions and trends going on all about us and of which the question of medical economics is only one phase.

The world is in a turmoil of conflicting philosophies.

The Great War was a titanic physical struggle between armed forces involving also, of course, a conflict of ideas and ideals which, however, was easily stated and easily understood. Today there is being waged an equally titanic struggle between two conflicting schools of thought—Socialism and Individualism. In their wide ramifications and implications they affect the daily lives, habits, and welfare of the average person more directly and more consciously than that devastating physical encounter which ceased on Armistice Day in November, 1918.

This peacetime war is one of the products of the Great War but it is not a consequence of it. Our present battle of conflicting ideas and interests was bound to come sooner or later. The Great War merely hastened it.

That War conscripted the youth of the country who were physically and mentally fit. This ideological war conscripts each and every one of us—old and young, rich and poor, strong and weak. No individual and no group can claim exemption.

And so I submit that the problem of medical economics and its solution represents only one phase of a larger and more general economic, social, and political controversy. That phase, dealing as it does with the subject of the health of the nation, is naturally of special interest and concern to the members of the medical profession. But it is well to keep in mind that you have not been singled out as an isolated group charged with a failure to measure up to your collective responsibilities. On the contrary, as individuals, you have set a standard of service which entitles you to high honors. To the extent to which, however, you are asked, collectively, to consider ways and means of promoting the health of the nation you are in precisely the same position as is every other professional group and every business enterprise upon which pressure is being brought to bear, in one way or another, to conduct their private affairs in a manner that will promote the public interest.

And now let us look at the proposals which have been submitted by the Fund's Staff in so far as they affect the medical profession. In so doing I will give my own understanding of these proposals and the reasons why they have seemed to me worthy of serious consideration.

First: The proposals do not constitute a health insurance plan worked out in all of its administrative and financial details. Rather they are a series of principles on which any plan, if, as and when developed, should be based. You must have already noted the striking similarity between these principles advocated by members of our Staff and the principles recently adopted by the American Medical Association, the American Dental Association, and other professional groups.

Second: The principles advocated by the Staff and by organized medicine place marked emphasis on maintaining a continuing personal relationship between the doctor and his patient and, therefore, on this all-important point the proposals are calculated to maintain the status quo.

Third: There is no disagreement, so far as I am aware, on such other important points as, (1) freedom of all competent practitioners who subscribe to necessary rules of procedure to engage in insurance practice; (2) freedom of all persons to choose their physician or dentist from among all practitioners in the community who engage in insurance practice; (3) freedom of insurance practitioners to accept or reject patients; (4) no interference by the insurance system with the private purchase of medical service by those persons who can afford it; (5) separation of cash benefits from medical benefits; and (6) professional control of professional personnel and procedures.

With this brief summary of the proposals of the staff it must be clear that, instead of being conceived in a spirit of hostility to the medical profession, they are designedly intended to be positively and affirmatively helpful to the medical profession. Some of you may say that, with your intimate knowledge of how medicine should be practiced, the proposals will not be helpful but harmful to the medical profession. This is not the time or place to discuss that. My point is that one of the purposes of the Staff was to make proposals that would be of benefit to the doctors.

If health insurance comes as a result of State or Federal legislation, embodying the principles as to which there appears to be a general accord, it would say, in effect, to the doctors: Keep the profitable part of your practice and convert at least part of your free work into services for which you will be paid; cultivate a group of new potential patients with which you would not otherwise come in contact; do not in any way alter your personal, financial and professional relationships with your private patients; maintain those personal relations, as far as you can, among your insured patients (and you should be able to do this as well as if not better than is now being done in much of your hospital and clinic work) and be assured that in doing all these things you are at the same time promoting the health of a vast number of people who now receive inadequate medical care or no medical care at all.

Let me hasten to anticipate at this point a comment that must be in the minds of some of you. You are saying: "Put that way it sounds all right but that is not the whole story." You are quite right. It is not the whole story. While I believe all that I have said is true, it ignores some dangers that will have to be studied, appraised, and guarded against. There must be an avoidance of the evils of bureaucracy. There must be a freedom from political influence. There must be no repetition of the defects disclosed in the administration of the workmen's compensation laws. The spirit of self-reliance and self-respect among the insured

group must be maintained. Malingering must be strictly dealt with and minimized. The risks of racketeering and chiseling should not be overlooked. All these are possible dangers that can only be appraised when a plan in all of its administrative and financial details has been worked out and submitted for critical study and analysis. But you should not wait until a plan has been completely worked out. If you do, you may be making the same mistake which I am told by my medical friends was made by the profession in respect to the workmen's compensation laws; you will be permitting others than the members of your profession to lay down the rules of the game. You will recall that the compensation laws were at first cash-benefit systems to which medical care was later tacked on. It has been difficult, I understand, to eliminate this fundamental weakness of the laws and to improve their medical provisions.

The administrative and financial aspects of the plan are quite as important as are the underlying principles. At best mistakes will be made. Some unanticipated evils will creep in. Human nature will continue to be human nature. But the answer to all this is that the ultimate goal is worth some risks if they are not too serious. Furthermore, potential new evils must be weighed not against Utopia but against existing conditions. Your leaders have voiced the general dissatisfaction with the inadequacy of the present methods of paying for medical care and with the quality of some of the medical care as given in free clinics. The advantages, both to those in need of medical care and to those who are equipped to meet that need, have seemed to me to outweigh the disadvantages *provided*—and this, I believe, goes to the very heart of the problem—provided, the doctors themselves become wholeheartedly determined to make the plan a success.

Personally, I would have little faith in seeing achieved the full results hoped for without the cordial cooperation of the practicing physicians. Laws are not self-enforcing. To become effective they must have the support of public opinion—in this case medical opinion. Plans on paper are sterile unless vitalized by human energy. While it would be too much to expect unanimity in your profession I would hope that the predominating opinion may crystallize in favor of some plan for mutualizing the costs of medical care that would meet the needs of that vast group of our people who are neither well-to-do nor wholly destitute and who cannot, as individuals, budget their medical costs but who as members of a group can do so, and would also make provision on a more satisfactory basis than at present for the medical care of the indigent sick.

GRIEVANCES AGAINST THE FUND

Next, let us put on the table the grievances directed against the Fund and with scalpel and forceps perform an exploratory operation.

If there is one complaint that stands out above all others, it is the charge of meddling by a lay group in an essentially medical problem. "No smug reformer is going to tell me how to practice medicine" has been voiced time and time again. This is a very human and natural reaction. Even the typical grandmother shows resentment at any proffer of aid as to the best way to remove the contents of an egg.

As a lawyer I would resent meddling by a lay group as to how the members of the bar should practice law—despite the fact there is ample room for improvement. But, on the other hand, if any group, lay or otherwise, should concern itself, not with reforming the practice of the law, but with ascertaining the facts as to the number of people who suffer injustice because they cannot afford to retain a lawyer and should further concern itself with proposals of putting justice within the reach of all whose rights are infringed, without disturbing the personal, professional, or financial relationship between a lawyer and his regular clients, I would consider such proposals with no feeling of resentment. On the contrary, I would look upon such proposals with a hopeful interest particularly if they held out the prospect of creating a body of new clients and of compensating the members of the bar for services for which otherwise they would receive nothing.

NOT WHOLLY "LAY" ORGANIZATION

In justice to the Fund may I ask the doctors to hesitate before classifying the Fund as a wholly "lay organization." It is true that its own Technical Staff includes relatively few practicing physicians. The reason for that is easily understandable. The Fund's historical approach to the subject of health has been from the angle of public health. It has never dealt with the technique of medical practice nor with curative medicine. Therefore, the senior personnel of the Staff has been recruited from the ranks of those who have made a study of public health problems.

However, it should be noted that the Staff does include three medical members, one of whom is a practicing physician and the other two have only recently given up their practice to do research and administrative work. In addition, among the Staff's collaborators, there are three other physicians who are engaged in practice. Among the seven members of our Technical Board there are four graduate physicians, two of whom are in private practice. Our Advisory Council includes twenty-three physicians among its members and many of these are eminent private practitioners.

I mention these facts not to persuade you that we are primarily a medical organization, for we are not, but merely to indicate that our Fund is constantly subject to the influence of medical points of view and of a medical understanding of the problems with which we deal.

We intend to go still further in this direction. We are in the process of forming a medical committee, which will be associated with our Advisory Council and which I hope will include members of the profession who have made a study of medical economics, to collaborate with our staff in such further studies as may be appropriate after we know the results of the conferences now pending in Washington under the auspices of the President's Committee on Economic Securtiy.

Such studies should be made available to all groups interested in the subject of health but should not be used by those associated with our Fund to influence the opinion of the general public.

I am constrained to mention one difficulty with which we are confronted in this connection and which we have encountered on other occasions. That is the difference of opinion we find among the doctors themselves as to who should be chosen as truly representative of medical opinion on a subject of this kind. In order to satisfy the varied viewpoints it would appear that this auxiliary committee should be made up of at least one hundred doctors! We will, however, try to get a committee of workable size that will be reasonably representative.

Now that I have ventured one mild rebuke to the medical profession, may I make amends by mentioning another? Is there not some truth in the statement that part of the hostility to foundations concerned with the public aspects of health is due to the failure of the medical profession to take an active part in the public health movement during its early stages? That movement has been developed to a large extent under the auspices of non-medical organizations and that, in turn, has produced an unfortunate "group consciousness" which militates against cooperation between the two groups. I said to one of our most outspoken critics the other day that the situation reminded me of the conflicts I used to see many years ago on the western prairies between the cattle men and the sheep men. In this less picturesque day six-shooters have not yet been resorted to but the underlying thought that there is an irreconcilable conflict of interest is present. It is against this fundamental concept of divergent interests that I would earnestly dissent. I would like to have a small part in dissipating it for all time.

Our Fund must look in the future to the medical profession for advice more than it has in the past. I urge your profession not to repeat, in this matter of the public aspects of medical costs, what many of your leaders have told me was a mistaken attitude on the part of the profession at the inception of the public health movement. I know you will not forget that some of the greatest names associated with your honorable profession are those who devoted themselves to the preventive and public health aspects of medicine—Jenner, Chadwick, and Shattuck; Pasteur, Koch, and Lister; Gorgas, Trudeau, and Welch—most of them physicians and some of them well known for their skill in curative medicine. These men rank with your great healers of human suffering. Your profession can ill spare either type. Its glory lies in the fact that you have both.

In this general connection there is one other point that should not be lost sight of and that is the value which a Fund like ours can be to the medical profession, if only a basis of helpful cooperation can be established. Such a Foundation can educate the public mind by making it more health conscious, and can also educate it to place ever-increasing reliance on the medical profession as the only safe and sound agency from which to secure competent service. I believe our Fund has already been of some use in this respect. The education of the public mind on just these points was an important feature of the Health Demonstrations and was attended with some success. More work of this kind and further efforts in directions that may be proposed by those of our medical advisers who are known to be "clinically minded" and which would also be helpful in promoting the health of the public would furnish a basis for mutually helpful cooperation.

As the concept of public health has broadened it has gradually become symnonyous with the health of the public, and in this relatively new aspect activities designed to promote the health of the public begin to impinge upon the interests of those whose primary activity has been in the field of curative medicine.

I did not clearly understand this factor during the early process of its development. I have been vaguely aware that there must be some reason why our Fund, which was trying to keep people well, was finding itself in apparently growing discord with the doctors who were trying to make people well.

I can conceive of questions arising where the public good might conflict with the private interests of the practicing physician. Fortunately, in this matter of health insurance, there appears to me no such conflict when the true nature of the Staff's proposals is understood.

Such a conflict was supposed to exist in the earlier stages of the Health Demonstration in Cattaraugus County. It was there that the first attacks on the Fund originated and it was from that source that these attacks spread to other parts of the country. But, before that demonstration came to an end, the earlier criticisms appeared to fade away and I am told that a better feeling was established. We had no comparable experiences in the other two demonstration areas—Syracuse and the Bellevue-Yorkville District in New York. On the contrary, so far as I am aware, we had the cordial cooperation of the doctors in those areas.

INTEREST IN HEALTH INSURANCE

Speaking for myself, I may say that my own interest in so-called health insurance was first

aroused because of the promise it held not only to meet a public need but also to correct a grave injustice to one of the most useful, ill-paid, and imposed-upon professions in the country. Do I hear someone say: "He seems to be friendly enough but God save us from our friends"? Which brings us back to one of the purposes of my remarks this evening and that is, to make clear what the Fund's Staff has proposed and, equally important, what it has not proposed.

The bogey of "State Medicine" or "Socialized Medicine," which arises in the minds of many physicians when health insurance is mentioned, is due, in part I believe, to a misunderstanding and misinterpretation of the proposals which have been advanced by the Fund's Staff.

Health insurance, as such, does not concern itself with the technique or method of medical practice. It does not make the doctor the employee of the State. It is merely a system of paying the costs of medical care for an in-between group numerically variously estimated at millions of people through a system of group budgeting and prepayment. It is intended to be not only consistent with the private practice of medicine, but is based upon the maintenance and strengthening of private practice. Indeed, so far as the doctor is concerned, health insurance is the very antithesis of "State Medicine" because it is a system of providing funds from which to remunerate the private practitioners.

Without attempting to reconcile, or to appraise the conflicting reports as to whether the British system is on the whole satisfactory to the public and to the medical profession in that country, but confining myself solely to the charge that any health insurance plan is, or would become, completely socialistic, I would ask you to read a statement in the British Medical Journal of last April to the effect that the medical profession in Great Britain regards compulsory contributory health insurance as its main bulwark against a really socialistic movement which provides medical care by means of a whole-time salaried service.

Personally, I would regard the expansion of the free clinics as fraught with much more danger to medical incomes, and to the quality of medical care, and as tending more toward State Medicine, than is involved in the type of health insurance that we are discussing. In fact, I would hope that much, if not all, of the free work now done in hospitals and clinics might be placed on a compensation basis under a well conceived health insurance plan.

PROPAGANDA

There is another subject which has been frequently mentioned and which may be added to the list of complaints made against the Fund. That is the subject of propaganda. When I inquired into this matter I was told that the Fund had not been guilty of propaganda but that certain medical societies and certain medical journals had been flagrantly guilty in this respect.

My first impression was that the difference between education, which is held in high esteem, and propaganda, which is held in low esteem, might be expressed by defining education as a process of informing the public of one's own views on any given subject and by defining propaganda as a process by which your opponents inform the public as to their views on the same subject. But a little more thought convinced me that a less superficial, though still incomplete, distinction between education and propaganda would be to define education as a process of presenting the facts fairly and impartially with a strict regard for the truth irrespective of whether the truth helps or hurts the validity of one's conclusions, while propaganda is a process of presenting the facts in an intentionally biased and one-sided manner with scant regard for the truth. This disregard of the truth may be deliberate or it may be due to a lack of care in ascertaining what the truth is or to a willingness to give currency to unconfirmed rumors. In any case the effect is to mislead and confuse the public mind and to stir up unnecessary animosity.

In the last few months I have read, I believe, every article and address made by the Officers and Staff of the Fund on the subject of health insurance. While it is unquestionably true that the authors have reached a point in their studies where they are clearly in favor of applying the insurance principle to the hazards of sickness for the dual purpose of promoting the health of the public and of improving the financial status of those who render medical care (and to this extent their writings may be regarded as propaganda), I can find no instance where there has been a departure from the strict truth or where there has been a misrepresentation of the views of those who hold opposing opinions.

May I express the hope that my remarks this evening will be treated by the journals of the various interested professional groups, to which alone this address has been released, in the same friendly spirit, however adversely critical, that I have endeavored to show in all that I have said?

COMPULSORY OR VOLUNTARY HEALTH INSURANCE

Another question which has been vigorously, and sometimes hotly, debated, is whether a health insurance system should be compulsory or voluntary. In considering the answer to this question bear in mind that in the proposals put forward by the staff there is no suggestion of compulsion on the doctor. The compulsion relates only to the insured person, and possibly to his employer, to set aside jointly, when earnings are not interrupted by sickness or by unemployment, a modest amount each year (little if any more than is ordinarily spent in haphazard fashion) with which to pay the costs of his medical care when sickness comes. In effect,

it is a proposal to practice thrift collectively, and if so practiced the cost to many individuals is far less than if they attempted to do the same thing for themselves.

In point of fact, human nature being what it is, we all know that the majority of individuals would not voluntarily make any such provision against the rainy day of sickness and those who would be so disposed could not possibly make adequate provision out of their small incomes for anything beyond relatively trivial illness. Hence, the reason for suggesting the insurance principle that has demonstrated its value in other fields as an economical and effective protection against the hazards which menace life and property.

In this general connection it has been urged that, instead of adopting a state-wide health insurance plan, with or without a Federal subsidy for those states which conform to an approved standard, it would be better to let groups within a state experiment with a variety of plans according to local preferences and local conditions. Certainly no one can reasonably object to that procedure, for all such efforts are in the right direction. I understand that some of these plans are working very well. Some doubts have been expressed as to the stability of the financial support of some of these plans and a more serious doubt as to their capacity to reach more than the fringe of those for whose benefit the more comprehensive proposals are intended. However, pending the time when the preponderant opinion among the medical profession is in favor of dealing with the problem in a more fundamental manner, I hope that experiments of this kind will be continued and multiplied.

My attention has also been called to an interesting series of proposals worked out by a medical group and which involves modernizing and perfecting present state statutes which regulate the provision for medical care for the indigent through agencies of public assistance, and also for the establishment of a system of credit agencies through which solvent persons of limited resources can meet their cost of medical care to be repaid out of their income over a reasonable period, and which also contemplates a program to educate the people as to the importance of seeking medical care from qualified physicians instead of resorting to quackery and patent medicines.

Such proposals also contemplate continuous group instruction of a technical and scientific character of the entire medical profession and an insurance system which will provide an assured income for hospitals and for those who cannot afford to meet the costs of major operations or of serious and prolonged illnesses.

The objectives of such a system are obviously desirable and, while the method and approach to their accomplishment are very different, some of them are compatible with the proposals of our staff.

Until plans embracing the administrative and financial features of each system are worked out it is, of course, impossible to make any intelligent comparison.

STATE EXISTS FOR INDIVIDUAL

Despite the growing tendency of the state to engage in enterprises that heretofore have been reserved as fields for private initiative and individual development—or, to put it more accurately, *because* of that tendency—those of us who believe that the state exists for the benefit of the individual rather than that the individual exists for the benefit of the state are deeply concerned by the long range implications of this modern trend.

The doctors who oppose health insurance base their opposition, in part, on their fear and dislike of bureaucratic control and the injection of politics into anything so intimate and so individualistic as the practice of medicine. I share their misgivings, and, unless the plan as finally worked out can give reasonable assurance that these risks can be greatly minimized, if not wholly avoided, I would wish to proceed cautiously until it became quite clear that the advantages which appear on the face of the proposal would not be nullified by latent defects that might later develop in the administration of a plan based on such proposals.

But here again we are dealing with a factor that is not peculiar to the medical profession or to the problems which are facing it in this world of today.

The period is passing when business men were turning in desperation to the Government to save them from the devastating effect of the depression and from the consequences of their own destructive competition. The problem of cleaning up the wreckage left in the wake of the depression still remains. Hence, this tremendous and pressing problem of relief which would have been immeasurably less serious if collective thrift plans had been in operation for, say, five years prior to 1929.

Already we are beginning to hear the familiar cry of business—big and little—"Balance the budget, reduce taxation, and take the Government out of business—particularly business in which the Government competes with private industry." To me it is a heartening cry for I have no hope for a society made up of government proteges.

But to my mind the best way, and in fact the only way, to take the Government out of business is for business and for gainful professions to take the incentive for providing reasonable social security away from the Government by seeing to it that the major part of the job is done by them and under their direction.

If, however, business and the gainful professions fail to provide such security, and by the same stroke afford a measure of security to capitalism, the Government will, I fear, continue to receive

popular support for meeting these social needs, and the end of that road is out and out socialism.

SUMMARY OF ACTIVITIES OF FUND

There is only one other matter of which I would speak briefly before concluding.

I would call to your attention a brief summary of certain activities of the Fund undertaken at the instance of members of the medical profession and carried out either under their direction or with their active and cordial participation.

The Fund has contributed over $250,000 toward the research work in tuberculosis at the Saranac Laboratory of the Trudeau Foundation and toward the endowment fund of that Laboratory. This work has been under the direction of Dr. Edward R. Baldwin, and many physicians specializing in tuberculosis have attended the Trudeau School and participated in these studies.

You are familiar with the work of the Diphtheria Prevention Commission in New York, which was conducted in cooperation with the five county medical societies of Greater New York, and which had the cordial support of the members of the medical profession throughout the city. There is ample evidence that the project not only achieved notable results but also was of material benefit to the physicians.

The Fund also contributed to the support of the National Board of Medical Examiners, with which you are familiar. As you know, this Board is made up entirely of physicians and Dr. Walter I. Bierring, president of the American Medical Association, and Dr. Merritte W. Ireland, Chairman of the Council of Medical Education of the A.M.A., are prominent members of its Executive Committee.

The Fund has derived much satisfaction from its investment in the studies in cervico-vaginitis in children, which were proposed by Dr. Walter M. Brunet, and which were carried on and continued under the direction of Doctors Van Ingen, Holden, and Hendee Smith. I am told that the report of this Committee is considered an outstanding contribution to one of the most baffling subjects with which the medical profession has to deal.

Time does not permit further references to matters of this kind but there are a number of others which have brought the Fund into helpful associations with such medical men as Doctors John R. Paul, Arthur B. Duel, William H. Park and others. It is worthy of note that in connection with these medically conducted and Fund financed enterprises, all of which were arranged by the members of the Staff and later approved by the Board of Directors, the Fund has expended upwards of $600,000 without making any allowance for the time of the Staff or for other overhead expenses, whereas, in this matter of health insurance, the outlay of the Fund, apart from the time and traveling expenses of the Staff and the cost of the Fund's own publications, has been so negligible that it practically amounts to nothing.

Let me end your suspense as to whether I am bereft of terminal facilities by concluding with a few words on the subject of cooperation. It is one of the most overworked words in the English language. It connotes a lovely idea that is generally lost sight of when put to the test. Too often it means, "Cooperate with me and *my* terms"—the sort of cooperation that occurred when the tiger returned from a ride with the lady inside and the smile on the face of the tiger.

That is *not* the kind of cooperation which I offer to the medical profession on behalf of the Fund and of our Staff. We do not wish to swallow anyone nor do we wish to be swallowed. The Fund and the various branches of the medical profession, the public health and social welfare workers, the hospital and nursing groups and the voluntary agencies are all interested and have their place in this broad subject of health. The field is so vast and is capable of such enormous development that there is room and to spare for all of us. There is no need to step on each other's toes. There is every reason for us to go forward in orderly ranks and with irresistible power. No outside force—not even the Government—will seek to withstand our united strength if we are willing to do a good job. Our common cause will suffer only in so far as conflicts develop within our own ranks, or we fail to measure up to our responsibilities.

No one can deny that the subject of health is affected with a public interest. No one can deny it is a gainful occupation and, therefore, affected with a private interest. The doctor who contends that the whole field of health belongs exclusively to him is on untenable ground. The medical profession would not, I assume, wish to be put in the position where it is the sole representative of the private and public aspects of such a vital subject. No one can be really comfortable when he tries to act as lawyer for several interested parties, judge and jury, simultaneously.

On the other hand, the health foundations, the public health leaders, the social workers, and the voluntary agencies who fail to guard the rightful private interests of the practicing physician are acting unwisely, are guilty of a grave injustice and will retard their own efforts, for the reason, among others, that the family doctor, freed from financial worry and with greater opportunity to keep himself informed as to the progress in medical science, will not only continue to bring healing and comfort into the homes of his patients but will become a highly effective associate of the public health officer as well.

A recognition by the interested parties of these principles will furnish a sound basis for a cooperation that will be mutually helpful.

In this spirit I tender you our assistance and I ask for your help.

U. HOLZER
BINDER
BOSTON, MASS.

